

Montana Water Supply Outlook Report February 1, 2014



**Picture: Missouri River confluence near Three Forks, Montana as viewed
from Corbley Gulch, Bridger Range, Montana**

Taken by: Brian Domonkos 2/2/2014

Water Supply Outlook Report

and Federal - State - Private Cooperative Snow Surveys

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How forecasts are made

Most of the annual streamflow in the Western United States originates as snowfall that has accumulated high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are combined with snowpack data to prepare runoff forecasts. Streamflow forecasts are coordinated by Natural Resources Conservation Service and National Weather Service hydrologists. This report presents a comprehensive picture of water supply conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data, and narratives describing current conditions.

Snowpack data are obtained by using a combination of manual and automated SNOTEL measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation and temperature are monitored on a daily basis and transmitted via meteor burst telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

Forecast uncertainty originates from two sources: (1) uncertainty of future hydrologic and climatic conditions, and (2) error in the forecasting procedure. To express the uncertainty in the most probable forecast, four additional forecasts are provided. The actual streamflow can be expected to exceed the most probable forecast 50% of the time. Similarly, the actual streamflow volume can be expected to exceed the 90% forecast volume 90% of the time. The same is true for the 70%, 30%, and 10% forecasts. Generally, the 90% and 70% forecasts reflect drier than normal hydrologic and climatic conditions; the 30% and 10% forecasts reflect wetter than normal conditions. As the forecast season progresses, a greater portion of the future hydrologic and climatic uncertainty will become known and the additional forecasts will move closer to the most probable forecast.

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Montana Water Supply Outlook Report as of February 1, 2014

Little change was experienced over much of the state by the end of January, with snowpack down slightly and year-to-date precipitation up slightly from December 31. Several watersheds did benefit from above average snow and precipitation accumulation while others saw slight decreases. All but three major watersheds are at or above median snowpack on February 1 while precipitation across the state was slightly below average during January. With nearly 35 percent of the typical winter snowpack accumulation season remaining Montana's water supply situation is in good standing. March, April, May and June usually provide the greatest potential precipitation and these months will be key to continuing this strong snowpack currently in place.

Snowpack

Looking back over the course of January 2014 warm dry conditions prevailed through the majority of the month. However, during the beginning and end of the month, moisture laden storms dropped above normal snow during the relatively short periods. By the end of the month, snowpack figures only showed a slight decrease despite the dominating dry spell. Statewide snowpack dropped only two percentage points rounding snowpack to 109 percent of median on February 1. Last January experienced an even greater dip than was seen this year. So far this year the state's snowpack as a whole is looking most like 1991, 1989, 2004, and 2009, of which 2004 was the only year with a snowpack peaking below average.

Central Montana, including the Bridger, Belt, Big Snowy, and Crazy Mountain ranges continue to boast the strongest snowpack at 125 percent or better. The Red Lodge area of Montana, most particularly Rock Creek, has the most snow water equivalent on record dating back to 1981. In general Montana is seeing its best snowpack since 2011 and the fourth best snowpack of the last ten years. Improvements were made in western Montana in the Clark Fork with the exception of the Flathead. The Bitterroot saw the greatest improvement in the state from 91 last month to 109 percent of median at the end of January.

River Basin	% of Median	Last Year % of Median
Columbia	102	95
Kootenai	89	97
Flathead	106	96
Upper Clark Fork	110	95
Bitterroot	109	87
Lower Clark Fork	91	97
Missouri	114	100
Missouri Headwaters	108	103
Jefferson	115	103
Madison	100	103
Gallatin	111	106
Missouri Mainstem	126	93
Headwaters Mainstem	125	96
Smith-Judith Musselshell	144	97
Sun-Teton-Marias	108	93
Milk (Bearpaw Mountains)	119	78
St. Mary	99	103
St. Mary & Milk	107	95
Yellowstone	116	91
Upper Yellowstone	119	98
Lower Yellowstone	114	86
Statewide	109	96

Precipitation

While still below normal, year to date precipitation increased at the end of January slightly thanks to several basins above average precipitation this month. Basins such as the Gallatin, Sun-Teton-Marias, Bitterroot as well as others all saw better than 100 percent of average January precipitation. The deficits in fall precipitation earlier this year have proven to be a hard slope to climb to get back to average. Thankfully, snowpack is slightly above average in most locations and will hopefully persist through spring and negate the shortcomings of year to date precipitation.

River Basin	This Water Year % of Average	This Water Year % of Last Year
Columbia	82	71
Kootenai	71	62
Flathead	88	72
Upper Clark Fork	86	82
Bitterroot	86	81
Lower Clark Fork	72	63
Missouri	96	86
Jefferson	88	87
Madison	91	87
Gallatin	103	99
Headwaters Mainstem	95	79
Smith-Judith Musselshell	117	102
Sun-Teton-Marias	87	72
Milk	102	64
St. Mary	81	62
St. Mary & Milk	88	63
Yellowstone	117	117
Upper Yellowstone	113	114
Lower Yellowstone	123	121
Statewide	93	82

Reservoirs

State-wide reservoir storage was 107 percent of average and 102 percent of last year. Reservoir storage west of the divide was 128 percent of average and 111 percent of last year. East of the Divide, reservoir storage was 99 percent of average and 98 percent of last year.

River Basin	% of Average	Current as % of Last Year
Columbia	128	111
Kootenai	149	133
Flathead	112	95
Upper Clark Fork	97	93
Bitterroot	132	94
Lower Clark Fork	99	99
Missouri	99	98
Missouri Headwaters	98	93
Jefferson	77	75
Madison	110	103
Gallatin	98	100
Missouri Mainstem	98	98
Headwaters Mainstem	99	98
Smith-Judith Musselshell	106	88
Sun-Teton-Marias	96	97
Milk	151	121
St. Mary	103	55
St. Mary & Milk	137	97
Yellowstone	114	105
Upper Yellowstone	108	103
Lower Yellowstone	114	105
Statewide	107	102

Streamflow

State-wide, streamflows are forecast to be 98 percent of average. West of the divide streamflows are forecast to be 97 percent of average and east of the divide are forecast to be 100 percent of average.

Following are streamflow forecasts for the period April 1 through July 31. THE FIGURES IN THE TABLE BELOW ARE AN AVERAGE OF ALL FORECASTS WITHIN THE PARTICULAR BASIN AT THE 50 PERCENT EXCEEDANCE ONLY. ALL 50 PERCENT EXCEEDANCE FORECASTS ASSUME NEAR NORMAL WEATHER THROUGH THE END OF THE FORECAST PERIOD. FOR FORECASTS ABOVE AND BELOW THE 50 PERCENT EXCEEDANCE, LOOK TO THE SPECIFIC BASIN REPORTS.

April-July Streamflow Forecast Period		
River Basin	Forecast as % of Normal	This Year Forecast as % of Last Year Streamflow
Columbia	97	98
Kootenai	85	70
Flathead	99	91
Upper Clark Fork	108	134
Bitterroot	100	131
Lower Clark Fork	100	110
Missouri	95	134
Missouri Headwaters	90	160
Jefferson	89	198
Madison	83	115
Gallatin	103	143
Missouri Mainstem	96	128
Headwaters Mainstem	96	129
Smith-Judith Musselshell	135	252
Sun-Teton-Marias	93	101
Milk (Bearpaw Mountains)	108	Incomplete
St. Mary	94	87
St. Mary & Milk	95	87
Yellowstone	106	140
Upper Yellowstone	102	129
Lower Yellowstone	108	148
Statewide	98	114

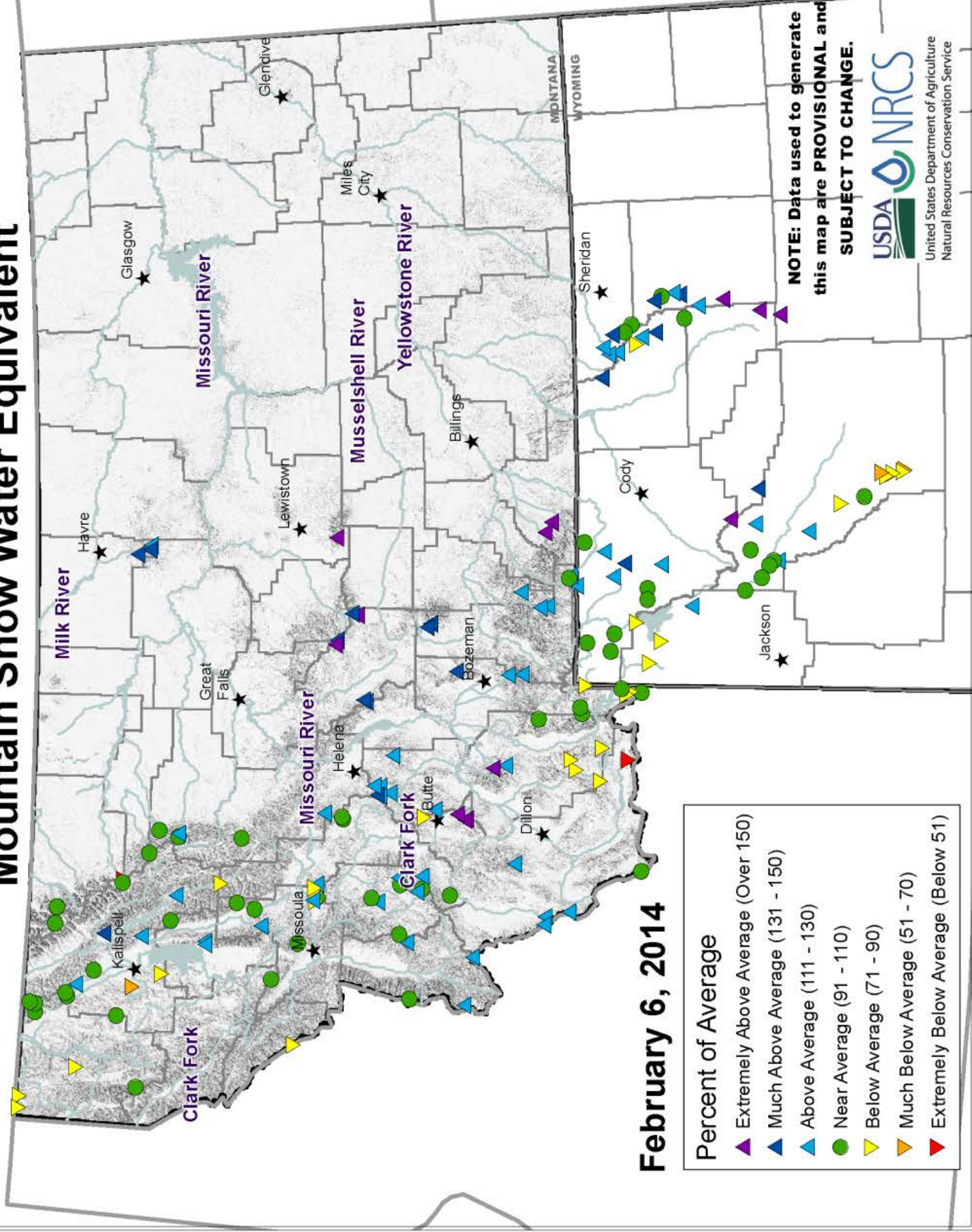
Surface Water Supply Index

The Surface Water Supply Index (SWSI) is a measure of available surface water availability for the spring and summer months. Water users that rely on mountain precipitation can use the index to evaluate seasonal surface water supplies. The SWSI accounts for mountain snowpack, mountain precipitation, streamflow, reservoir storage, and soil moisture.

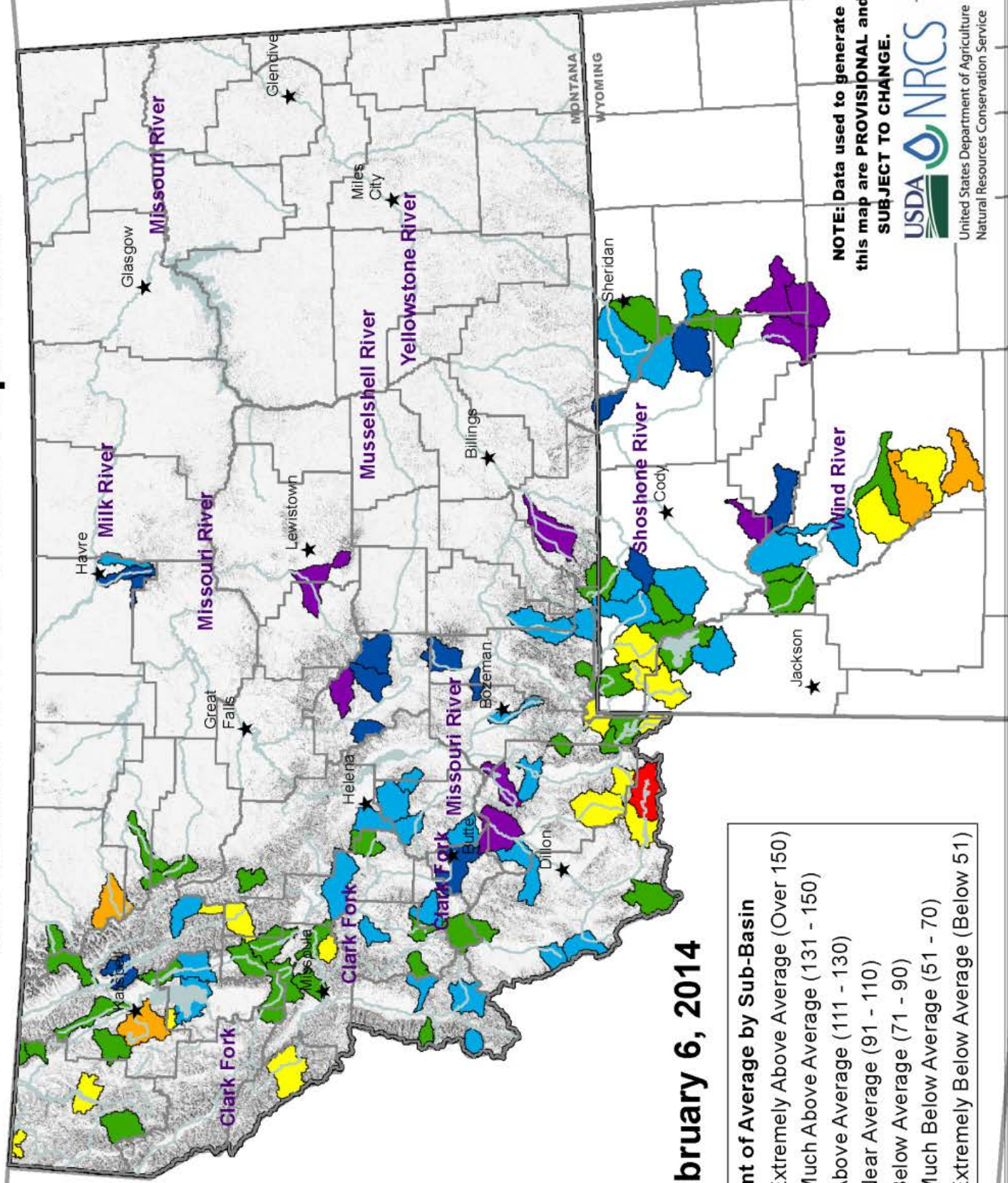
SWSI Scale	
+3.0 to +4.0	Extremely Wet
+2.0 to +2.9	Moderately Wet
+1.0 to +1.9	Slightly Wet
+0.9 to -0.9	Near Average
-1.0 to -1.9	Slightly Dry
-2.0 to -2.9	Moderately Dry
-3.0 to -4.0	Extremely Dry

This Year's SWSI	Last Year's SWSI	Watershed
-2.2	0.0	Tobacco River
-1.7	+0.2	Kootenai Ft. Steele to Libby Dam
+1.4	+0.3	Kootenai River below Libby Dam
+0.7	-0.3	Fisher River
-2.3	+1.3	Yaak River
-1.4	+0.6	North Fork Flathead River
-0.2	+1.2	Middle Fork Flathead River
+2.6	+3.1	South Fork Flathead River
+0.4	+0.9	Flathead River at Columbia Falls
+1.3	-0.3	Swan River
-0.2	+1.0	Flathead River at Polson
-0.3	-2.4	Mission Valley
+0.3	+1.3	Little Bitterroot River
+1.0	-0.3	Clark Fork River above Milltown
+0.4	-1.6	Clark Fork River above Missoula
+0.1	-0.6	Blackfoot River
0.0	-1.5	Bitterroot River
+0.3	-1.6	Clark Fork River below Bitterroot River
0.0	+0.1	Clark Fork River below Flathead River
-2.3	-0.3	Beaverhead River
-1.7	-0.8	Ruby River
-0.2	-1.0	Big Hole River
-0.1	-0.9	Boulder River (Jefferson)
+0.6	+0.5	Jefferson River
-1.5	-0.3	Madison River
-0.2	-0.8	Gallatin River
+0.1	+0.1	Missouri River above Canyon Ferry
+0.1	+0.2	Missouri River below Canyon Ferry
+2.8	+1.3	Smith River
-1.1	-0.7	Sun River
-0.2	+0.4	Teton River
-2.5	-2.5	Birch/Dupuyer Creeks
+4.0	+0.2	Upper Judith River
-1.2	-2.0	Marias River above Tiber
-0.2	+0.7	Marias River below Tiber
+1.4	0.0	Musselshell River
+0.2	+0.7	Missouri River above Ft. Peck
-1.4	-1.2	Missouri River below Ft. Peck
-0.6	+1.2	St. Mary River
+1.4	+1.1	Milk River
-1.0	-1.0	Dearborn River near Craig
+0.1	0.0	Yellowstone River above Livingston
+1.5	-1.7	Shields River
+1.0	-0.8	Boulder River (Yellowstone)
0.0	-2.0	Stillwater River
+1.5	-2.2	Rock/Red Lodge Creeks
+0.7	-0.9	Clarks Fork River
+0.3	-0.5	Yellowstone River above Bighorn River
+0.1	-0.9	Bighorn River below Bighorn Lake
-0.2	-2.7	Little Bighorn River
+0.2	-0.7	Yellowstone River below Bighorn River
+1.8	-1.9	Tongue River
+2.1	-0.4	Powder River

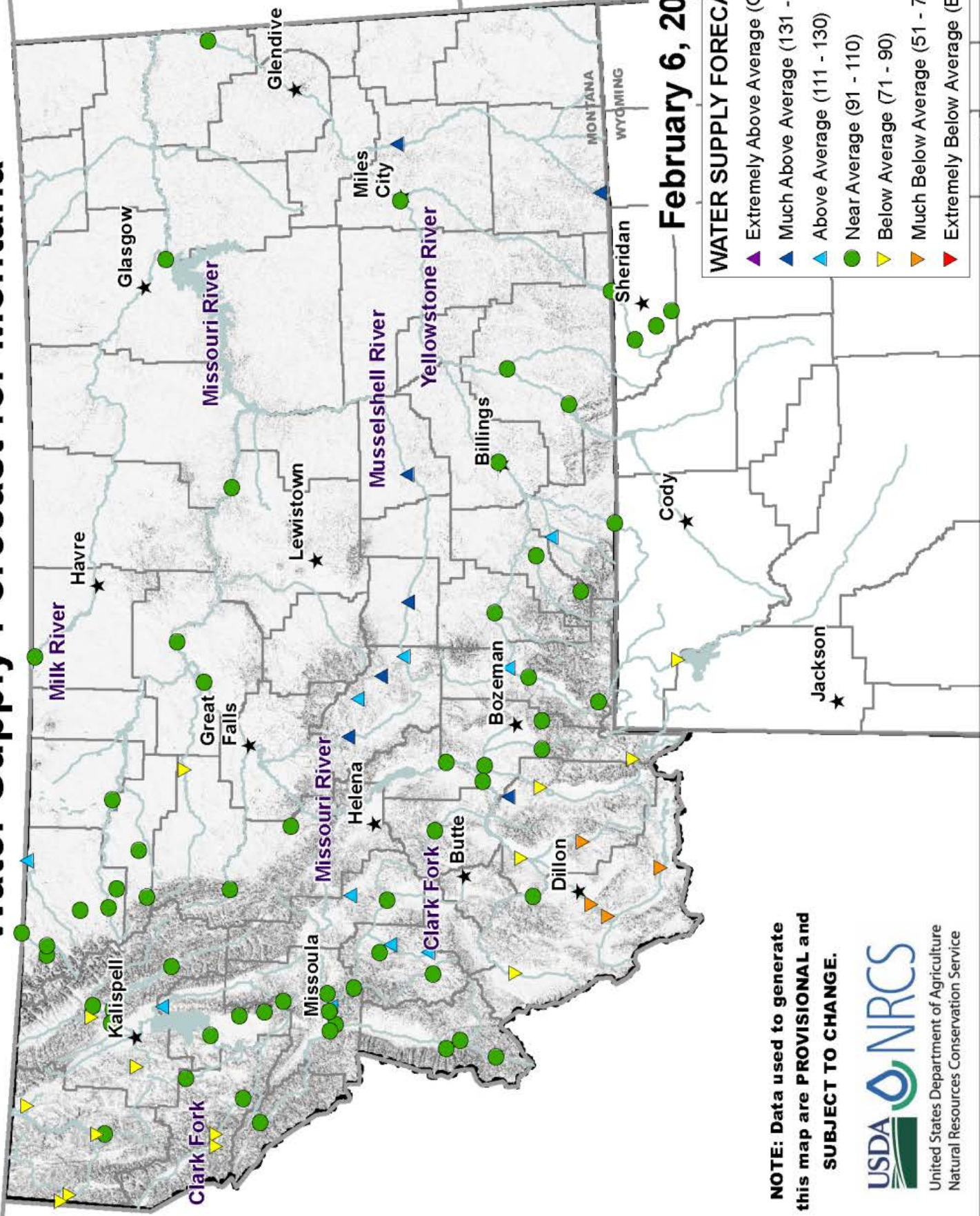
Mountain Snow Water Equivalent



Mountain Snow Water Equivalent



Water Supply Forecast for Montana

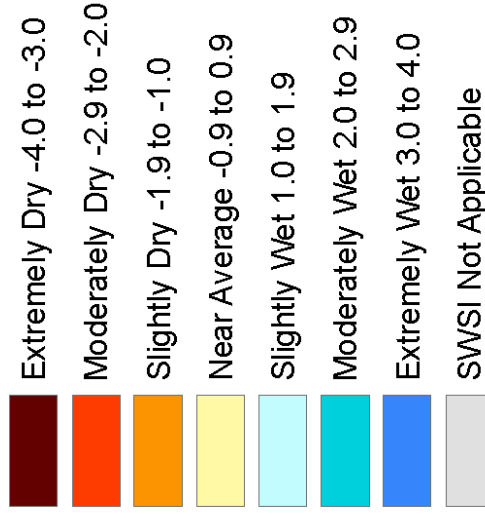
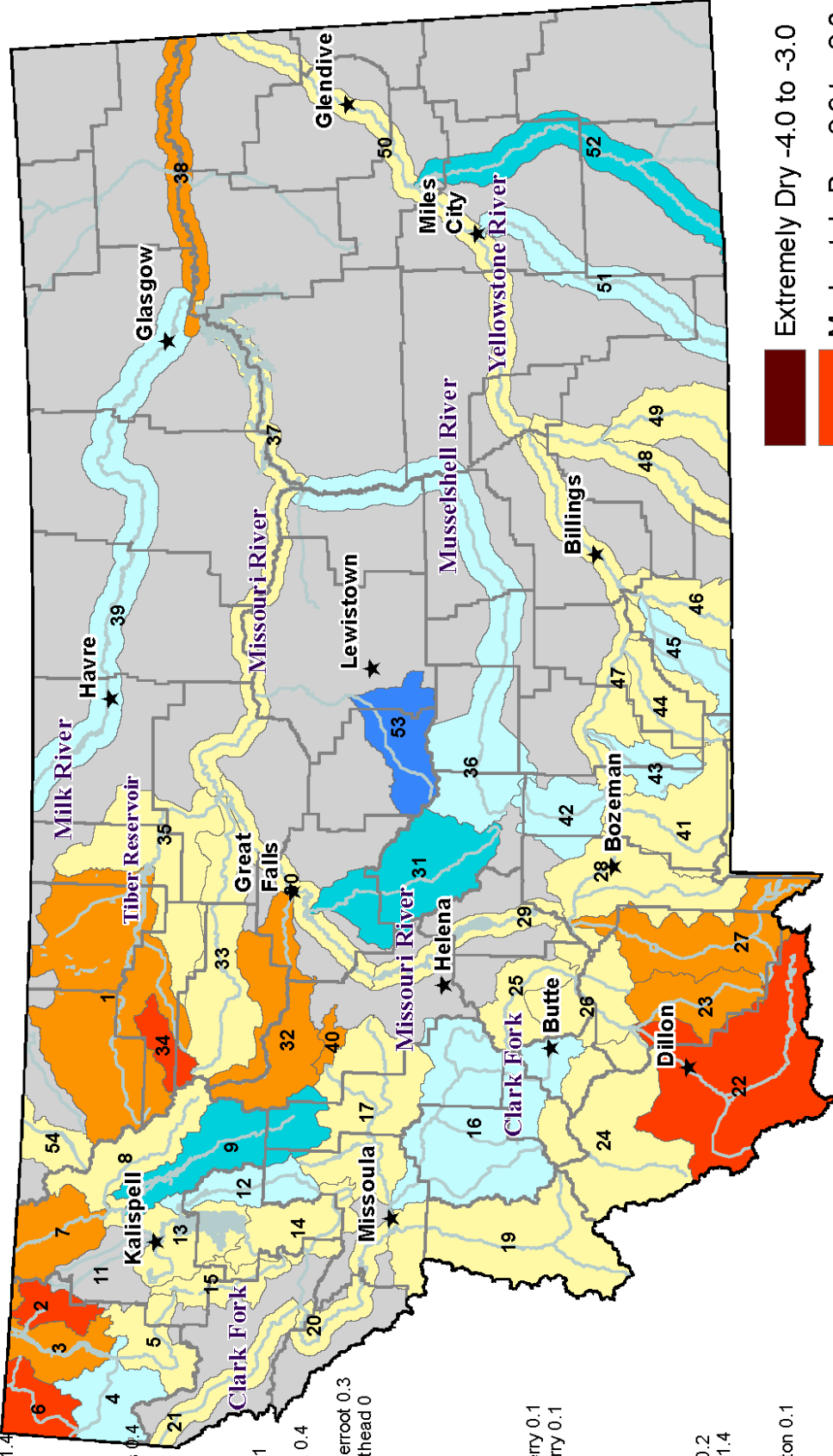


NOTE: Data used to generate this map are **PROVISIONAL** and **SUBJECT TO CHANGE.**

RIVER INDEX & SWSI VALUES

- 1 Marias above Tiber Reservoir -1.2
- 2 Tobacco -2.2
- 3 Kootenai Ft. Steele to Libby Dam -1.7
- 4 Kootenai below Libby Dam 1.4
- 5 Fisher 0.7
- 6 Yaak -2.3
- 7 North Fk. Flathead -1.4
- 8 Middle Fk. Flathead -0.2
- 9 South Fk. Flathead 2.6
- 10 Flathead at Columbia Falls 0.4
- 11 Stillwater/Whitefish Rivers 0.4
- 12 Swan 1.3
- 13 Flathead at Polson -0.2
- 14 Mission Valley -0.3
- 15 Little Bitterroot 0.3
- 16 Clark Fork above Milltown 1
- 17 Blackfoot 0.1
- 18 Clark Fork above Missoula 0.4
- 19 Bitterroot 0
- 20 Clark Fork River below Bitterroot 0.3
- 21 Clark Fork River below Flathead 0
- 22 Beaverhead -2.3
- 23 Ruby -1.7
- 24 Big Hole -0.2
- 25 Boulder (Jefferson) -0.1
- 26 Jefferson 0.6
- 27 Madison -1.5
- 28 Gallatin -0.2
- 29 Missouri above Canyon Ferry 0.1
- 30 Missouri below Canyon Ferry 0.1
- 31 Smith 2.8
- 32 Sun -1.1
- 33 Teton 0.2
- 34 Birch/Dupuyer Creeks -2.5
- 35 Marias -0.2
- 36 Musselshell 1.4
- 37 Missouri above Fort Peck 0.2
- 38 Missouri below Fort Peck -1.4
- 39 Milk 1.4
- 40 Dearborn near Craig -1
- 41 Yellowstone above Livingston 0.1
- 42 Shields 1.5
- 43 Boulder (Yellowstone) 1
- 44 Stillwater 0
- 45 Rock/Red Lodge Creeks 1.5
- 46 Clarks Fork Yellowstone 0.7
- 47 Yellowstone above Bighorn River 0.3
- 48 Bighorn below Bighorn Lake 0.1
- 49 Little Bighorn -0.2
- 50 Yellowstone below Bighorn 0.2
- 51 Tongue 1.8
- 52 Powder 2.1
- 53 Upper Judith 4
- 54 Saint Mary -0.6

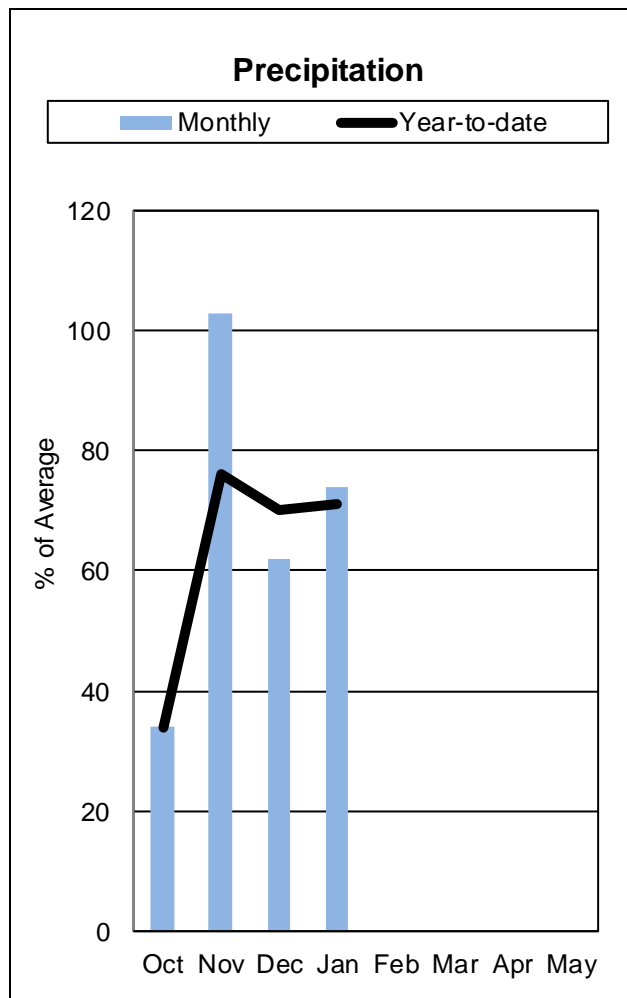
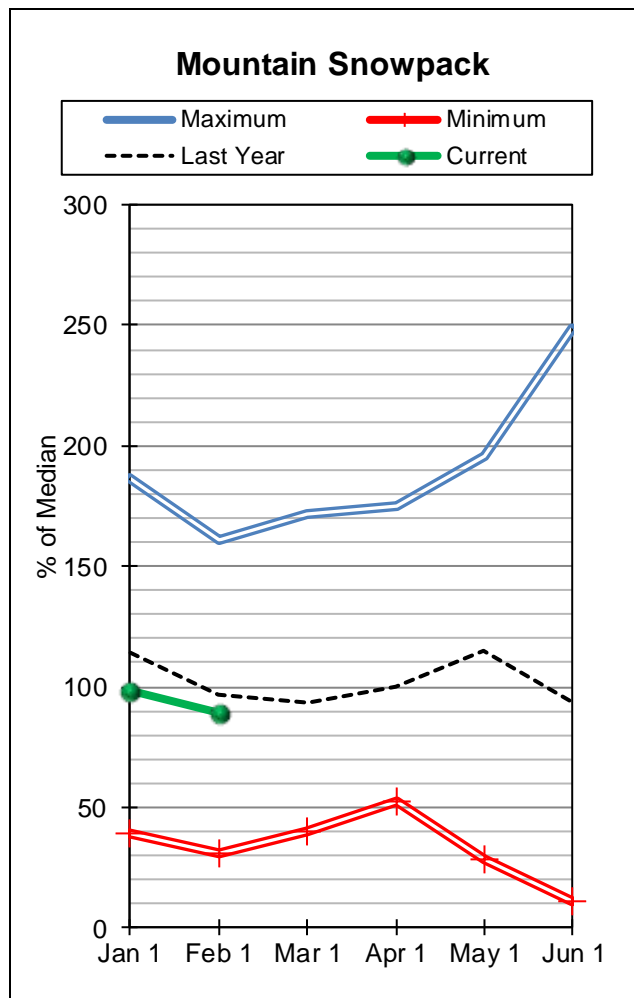
Surface Water Supply Index (SWSI) Values



February 7, 2014

NOTE: Data used to generate this map are **PROVISIONAL** and **SUBJECT TO CHANGE.**

Kootenai River Basin in Montana



Stormy and colder conditions started off the first half of January followed by a week or so of warm and dry conditions. Snow water equivalents (SWE) showed slight decreases at lower elevation sites or sites with more exposed areas. Storms and colder temperatures returned to finish out the month. Overall the SWE showed 93 percent of normal increase for January. This brings the basin wide snowpack percentages to 88 percent of normal and 90 percent of last year.

Mountain precipitation for January was 73 percent of average and 109 percent of last year. Year to date precipitation is 72 percent of average and 62 percent of last year. Overall precipitation totals are still being affected by the well below average October and November precipitation amounts.

Storage in Lake Koocanusa is 149 percent of average and 133 percent of last year.

Assuming average precipitation April through July streamflows are forecast to be 85 percent of average and 70 percent of last year.

Kootenai River Basin In Montana

Streamflow Forecasts - February 1, 2014

KOOTENAI RIVER BASIN in MONTANA	Forecast Period	Forecast Exceedance Probabilities for Risk Assessment Chance that actual volume will exceed forecast						30yr Avg (KAF)
		90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	
Tobacco R nr Eureka	APR-JUL	69	86	97	77%	108	125	126
	APR-SEP	76	95	108	77%	121	140	140
Libby Reservoir Inflow ¹	APR-JUL	3670	4300	4580	86%	4860	5490	5340
	APR-SEP	4520	5100	5370	86%	5640	6220	6250
Fisher R nr Libby	APR-JUL	114	157	186	91%	215	260	205
	APR-SEP	124	169	199	90%	230	275	220
Yaak R nr Troy	APR-JUL	200	260	300	71%	340	400	420
	APR-SEP	220	280	320	73%	360	420	440
Kootenai R at Leonia ^{1,2}	APR-JUL	4360	5200	5580	85%	5960	6800	6600
	APR-SEP	5260	6060	6430	85%	6800	7600	7590

1) 90% and 10% exceedance probabilities are actually 95% and 5%

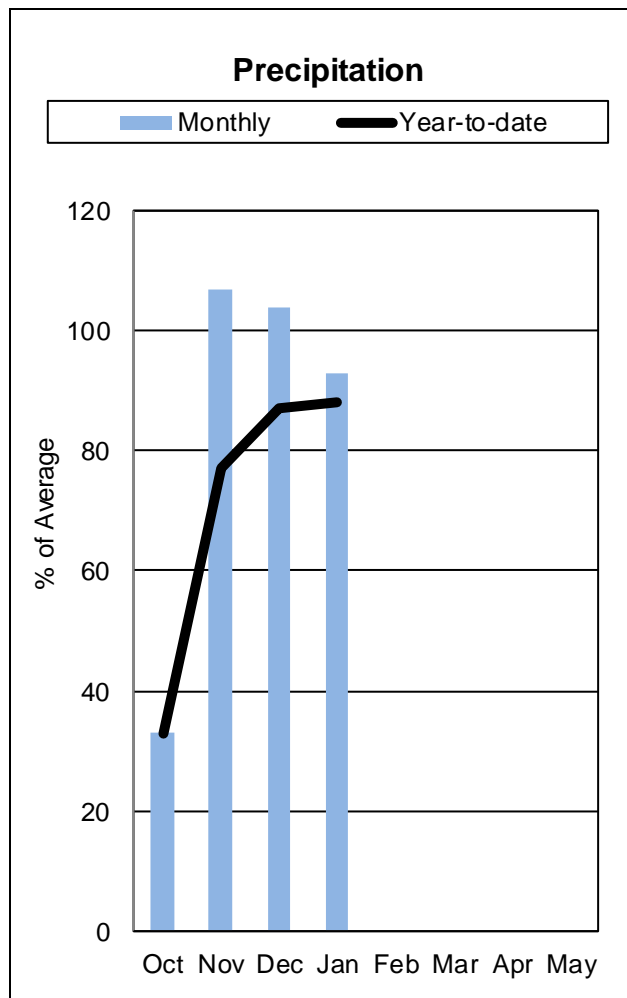
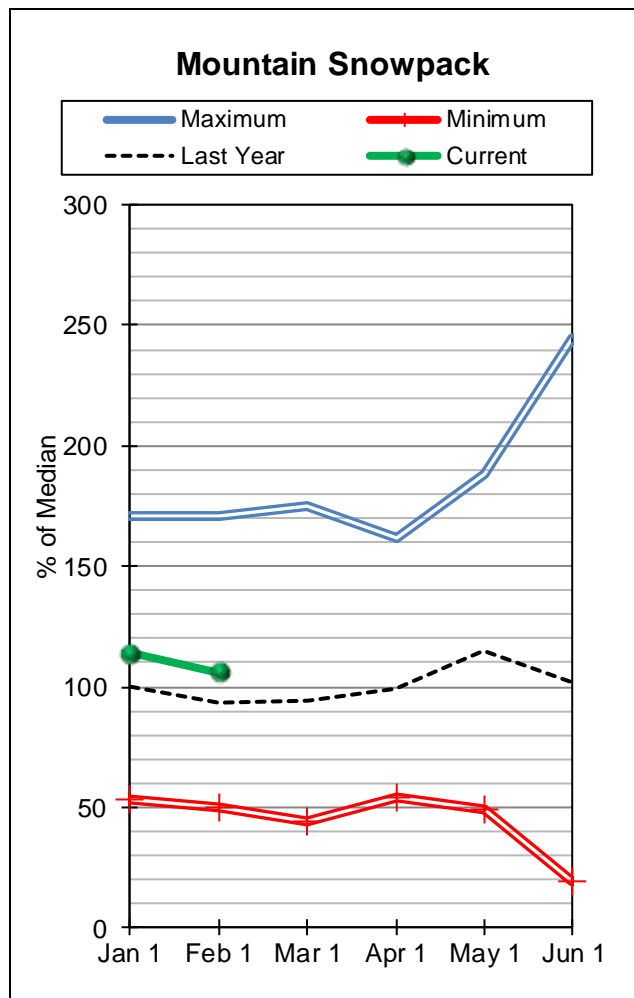
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

3) Median value used in place of average

Reservoir Storage End of January, 2014	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
LAKE KOOCANUSA	4281.3	3219.0	2865.0	5748.0
Basin-wide Total	4281.3	3219.0	2865.0	5748.0
# of reservoirs	1	1	1	1

Watershed Snowpack Analysis February 1, 2014	# of Sites	% Median	Last Year % Median
KOOTENAY in CANADA	19	97%	67%
KOOTENAI MAINSTEM	3	83%	99%
TOBACCO	3	98%	90%
FISHER	1	100%	77%
YAAK	2	83%	113%
KOOTENAI RIVER BASIN in MONTANA	9	89%	97%
KOOTENAI ab BONNERS FERRY	26	94%	87%

Flathead River Basin



The Flathead Basin started off January much like the Kootenai with good storms and colder temperatures. The mid-month warm dry spell resulted in some of the lower elevation or more exposed sites showing a slight decrease in snow water equivalents (SWE). The higher elevation sites were able to retain SWE values through this time. Again, storms and colder temperatures returned to the area towards the end of the month. All sub-basins showed above or near normal snowpacks. The Flathead basin wide snowpack is 106 percent of normal and 110 percent of last year.

January mountain and valley precipitation was 91 percent of normal and 103 percent of last year. Year to date is 88 percent of average and 72 percent of last year. Like the Kootenai, overall precipitation totals are still being affected by the well below average October and November precipitation amounts.

Reservoir storages are 112 percent of average and 95 percent of last year.

Streamflows for April through July are forecast to be 99 percent of average and 91 percent of last year. This is assuming average precipitation will be received in the basin.

Flathead River Basin

Streamflow Forecasts - February 1, 2014

Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed forecast

FLATHEAD RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
NF Flathead R nr Columbia Falls	APR-JUL	1120	1270	1370	89%	1470	1620	1540
	APR-SEP	1260	1420	1520	89%	1620	1780	1700
MF Flathead R nr West Glacier	APR-JUL	1200	1370	1480	99%	1590	1760	1500
	APR-SEP	1320	1490	1610	99%	1730	1900	1630
Sf Flathead R nr Hungry Horse	APR-JUL	1020	1150	1240	105%	1330	1460	1180
	APR-SEP	1090	1230	1320	105%	1410	1550	1260
Hungry Horse Reservoir Inflow ^{1,2}	APR-JUL	1590	1860	1990	107%	2120	2390	1860
	APR-SEP	1700	1990	2120	107%	2250	2540	1980
Flathead R at Columbia Falls ²	APR-JUL	4150	4620	4930	98%	5240	5710	5020
	APR-SEP	4550	5030	5360	98%	5690	6170	5450
Ashley Ck nr Marion ²	APR-JUL	3.1	4.5	5.5	85%	6.5	7.9	6.5
	MAR	0.23	0.69	1.01	85%	1.33	1.79	1.19
Swan R nr Bigfork	APR-JUL	500	555	595	114%	635	690	520
	APR-SEP	570	630	675	113%	720	780	595
Flathead Lake Inflow ^{1,2}	APR-JUL	4470	5310	5690	98%	6070	6910	5810
	APR-SEP	4850	5740	6150	98%	6560	7450	6270
Mill Ck ab Bassoo ck nr Niarada	APR-JUL	2.4	3.3	4	100%	4.7	5.6	4
	APR-SEP	2.7	3.7	4.4	100%	5.1	6.1	4.4
South Crow Ck nr Ronan	APR-JUL	8.1	9.5	10.5	104%	11.5	12.9	10.1
	APR-SEP	9.3	10.9	12	103%	13.1	14.7	11.6
Mission Ck nr St. Ignatius	APR-JUL	22	24	26	104%	28	30	25
	APR-SEP	26	29	31	103%	33	36	30
SF Jocko R nr Arlee	APR-JUL	28	33	36	109%	39	44	33
	APR-SEP	31	36	40	108%	44	49	37
NF Jocko R bl Tabor Feeder Canal	APR-JUL	28	31	33	106%	35	38	31
	APR-SEP	30	33	35	106%	37	40	33

1) 90% and 10% exceedance probabilities are actually 95% and 5%

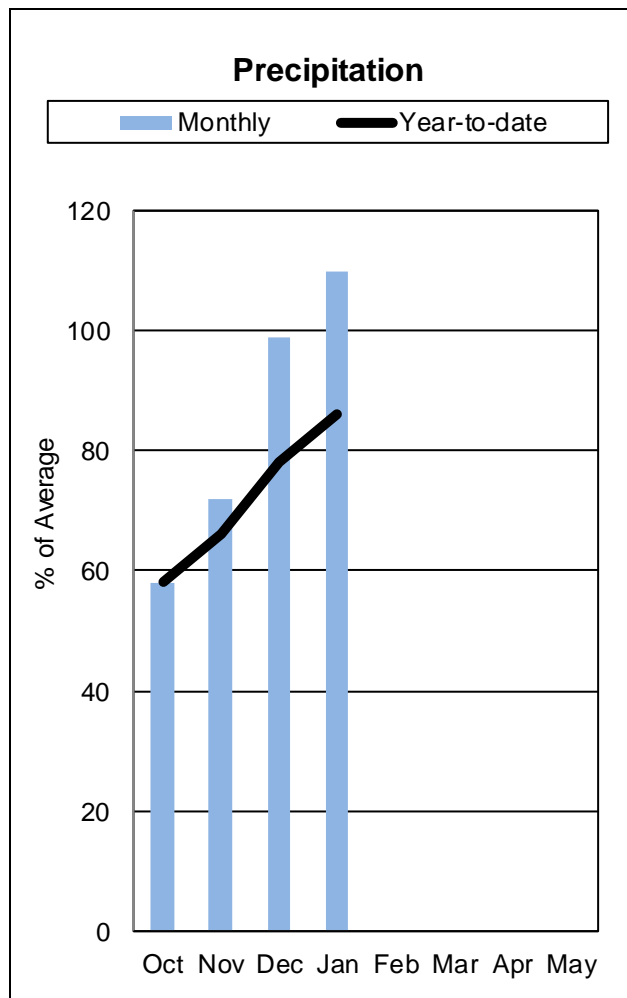
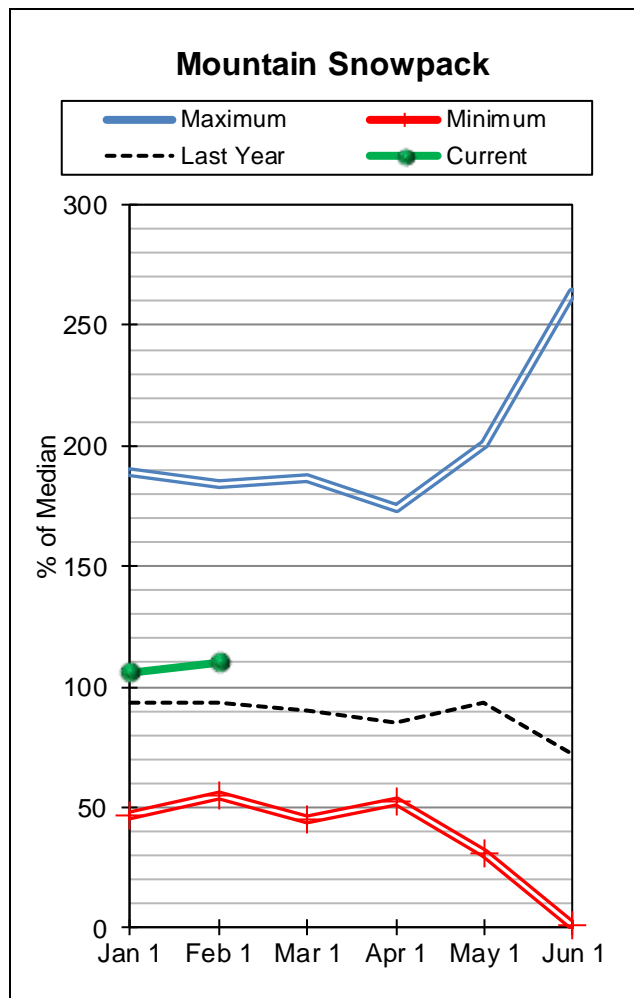
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

3) Median value used in place of average

Reservoir Storage End of January, 2014	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
CAMAS (4)	22.6	26.9	18.2	45.2
LOWER JOCKO LAKE	0.0	0.0	0.0	6.4
MISSION VALLEY (8)	25.0	21.9	30.9	100.0
HUNGRY HORSE LAKE	2848.2	2973.3	2375.0	3451.0
FLATHEAD LAKE	901.5	964.1	955.6	1791.0
Basin-wide Total	3797.4	3986.1	3379.7	5393.6
# of reservoirs	5	5	5	5

Watershed Snowpack Analysis February 1, 2014	# of Sites	% Median	Last Year % Median
NF FLATHEAD in CANADA	3	135%	155%
NF FLATHEAD in MONTANA	7	99%	94%
MIDDLE FORK FLATHEAD	4	108%	104%
SOUTH FORK FLATHEAD	6	111%	95%
STILLWATER-WHITEFISH	6	102%	89%
SWAN	5	111%	98%
MISSION VALLEY	3	109%	95%
LITTLE BITTERROOT-ASHLEY	2	73%	80%
JOCKO	2	104%	92%
FLATHEAD in MONTANA	24	105%	99%
FLATHEAD RIVER BASIN	26	106%	101%

Upper Clark Fork River Basin



The Upper Clark Fork River basin saw some improvement during the month of January. Storms during the first half of the month and during the last week of the month increased the snowpack totals and ended the month at 106 percent of normal, up 4 percent from last month, and 116 percent of last year at this time. Along the Divide in Flint Creek and Garnet Ranges in the headwaters of the Upper Clark Fork, significant snowfall raised the average of the basin, which the bulk of the moisture during the January storms dropped snow.

Precipitation totals from the basin show that 109 percent of the average January mountain precipitation fell over the past month. Overall, the water-year to date precipitation average for the basin is still below average at 87 percent for February 1st. This low water year precipitation number can be explained by our lack of valley precipitation during the Fall, while the snowfall in the mountains continues to be above normal this year.

Streamflow prospects for April-July have increased in the basin from Jan 1st, rising 6 percent of average to 108 percent, and 134 percent of last year's observed flows

Half of the reservoirs in the basin are at or above average for storage, with the exceptions being Lower Willow which is currently at 53 percent of average storage and Nevada Creek which is currently at 76 percent of storage for Feb 1st. Overall storage is 96 percent of average, and 93 percent of last year.

Upper Clark Fork River Basin

Streamflow Forecasts - February 1, 2014

Forecast Exceedance Probabilities for Risk Assessment Chance that actual volume will exceed forecast

UPPER CLARK FORK RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Little Blackfoot nr Garrison	APR-JUL	46	64	76	109%	88	106	70
	APR-SEP	51	70	83	108%	96	115	77
Flint Ck nr Southern Cross	APR-JUL	7.4	11.3	13.9	112%	16.5	20	12.4
	APR-SEP	8.2	13.1	16.4	112%	19.7	25	14.6
Flint Ck bl Boulder Ck	APR-JUL	33	48	58	112%	68	83	52
	APR-SEP	43	61	73	111%	85	103	66
Lower Willow Ck Reservoir Inflow ²	APR-MAY	3.2	5.6	7.2	99%	8.8	11.2	7.3
	APR-JUL	4.6	8.3	10.8	102%	13.3	17	10.6
MF Rock Ck nr Philipsburg	APR-JUL	45	55	62	107%	69	79	58
	APR-SEP	52	63	70	108%	77	88	65
Rock Ck nr Clinton	APR-JUL	189	240	275	110%	310	360	250
	APR-SEP	215	270	310	111%	350	405	280
Clark Fork R ab Milltown	APR-JUL	350	495	595	112%	695	840	530
	APR-SEP	415	575	685	111%	795	955	615
Nevada Ck nr Helmville	APR-JUL	7.4	12.8	16.4	115%	20	25	14.2
	APR-SEP							15.6
Blackfoot R nr Bonner	APR-JUL	545	665	745	103%	825	945	720
	APR-SEP	615	745	830	104%	915	1040	800
Clark Fork R ab Missoula	APR-JUL	930	1180	1350	108%	1520	1770	1250
	APR-SEP	1080	1350	1530	108%	1710	1980	1420

1) 90% and 10% exceedance probabilities are actually 95% and 5%

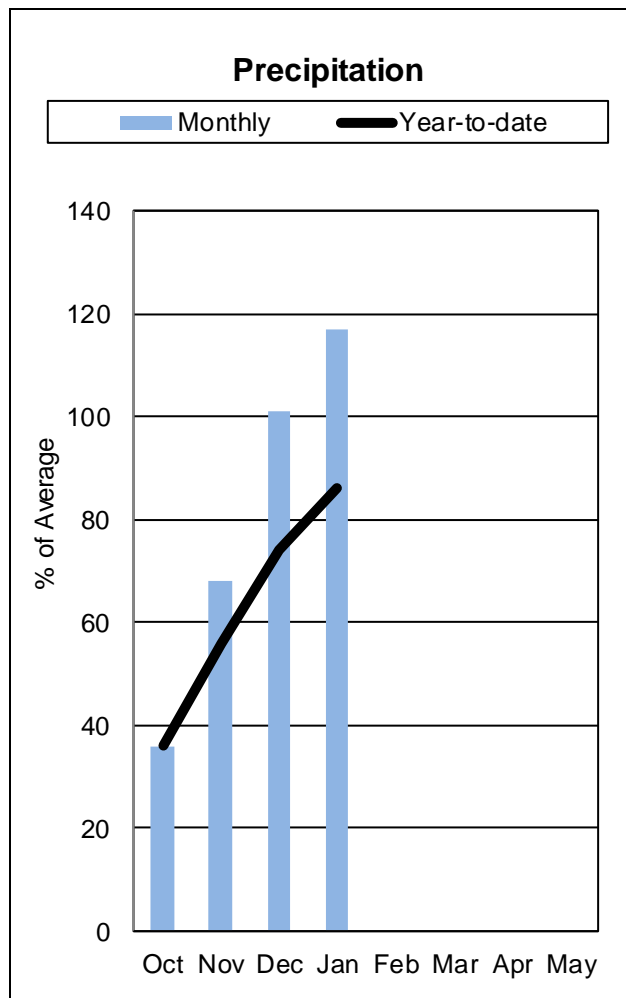
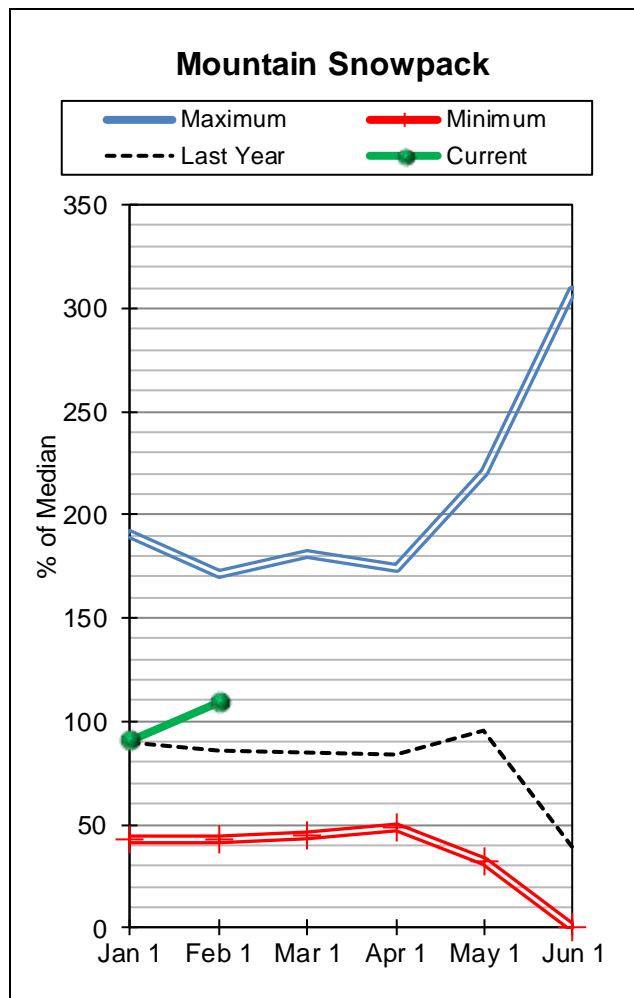
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

3) Median value used in place of average

Reservoir Storage End of January, 2014	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
EAST FORK ROCK CREEK RES	8.7	9.2	7.5	15.6
GEORGETOWN LAKE	27.2	28.1	27.8	31.0
LOWER WILLOW CREEK RESERVOIR	1.0	1.5	1.9	4.9
NEVADA CREEK RES	3.8	4.8	5.0	12.6
Basin-wide Total	40.7	43.6	42.2	64.1
# of reservoirs	4	4	4	4

Watershed Snowpack Analysis February 1, 2014	# of Sites	% Median	Last Year % Median
CLARK FORK ab FLINT CREEK	10	119%	92%
FLINT CREEK	5	111%	101%
ROCK CREEK	3	106%	96%
CLARK FORK ab BLACKFOOT	16	115%	95%
BLACKFOOT	12	104%	92%
UPPER CLARK FORK RIVER BASIN	25	110%	95%

Bitterroot River Basin



Snowfall-wise it was a good month in the Bitterroot River basin with many SNOTEL sites receiving above to well above average snowfall for the month of January. While the storm pattern did get put on hold like it did in the rest of the state, the abundant snowfall at the beginning and end of the month helped the basin to improve from last month. Currently the snowpack is 109 percent of normal, increasing from 91 percent on January 1st, and 125 percent of last year at this time.

Precipitation for both the mountains and valleys was above average during the month, with 117 percent of the average January precipitation, and 144 percent of last year. This helps to alleviate one of the concerns in the Bitterroot valley, lack of precipitation in previous years. Combining the below normal snowfall last year, dry summer months, and a lack of fall precipitation this year in the River basin, it lays out the concern over water this year. All these factors lead to below average soil moisture entering the winter, and can influence the runoff characteristics when we begin snowmelt. Current water-year to date precipitation beginning Oct 1st is 86 percent of average, up from 81 percent on Jan 1st, and 81 percent of last year at this time. Hopefully the weather pattern holds up and more recovery is seen in the basin.

Streamflow prospects are up marginally from 99 percent on Jan 1st to 100 percent for the April-July time period.

Reservoir storage in the basin is 132 percent of average, 94 percent of last year.

Bitterroot River Basin

Streamflow Forecasts - February 1, 2014

Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed forecast

BITTERROOT RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
WF Bitterroot R Nr Conner ²	APR-JUL	86	115	134	105%	153	182	128
	APR-SEP	93	125	147	106%	169	200	139
Bitterroot R Nr Darby	APR-JUL	280	365	425	104%	485	570	410
	APR-SEP	345	430	490	104%	550	635	470
Como Reservoir Inflow ²	APR-JUL	57	64	69	91%	74	81	76
	APR-SEP	60	67	72	91%	77	84	79
Bitterroot R nr Missoula	APR-JUL	840	1020	1140	99%	1260	1440	1150
	APR-SEP	930	1120	1250	100%	1380	1570	1250

1) 90% and 10% exceedance probabilities are actually 95% and 5%

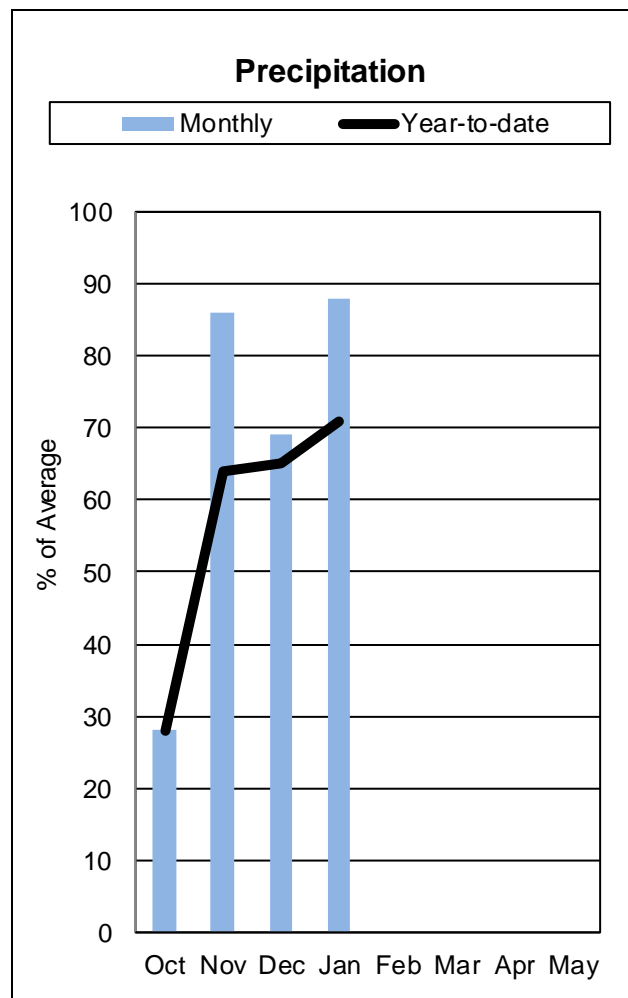
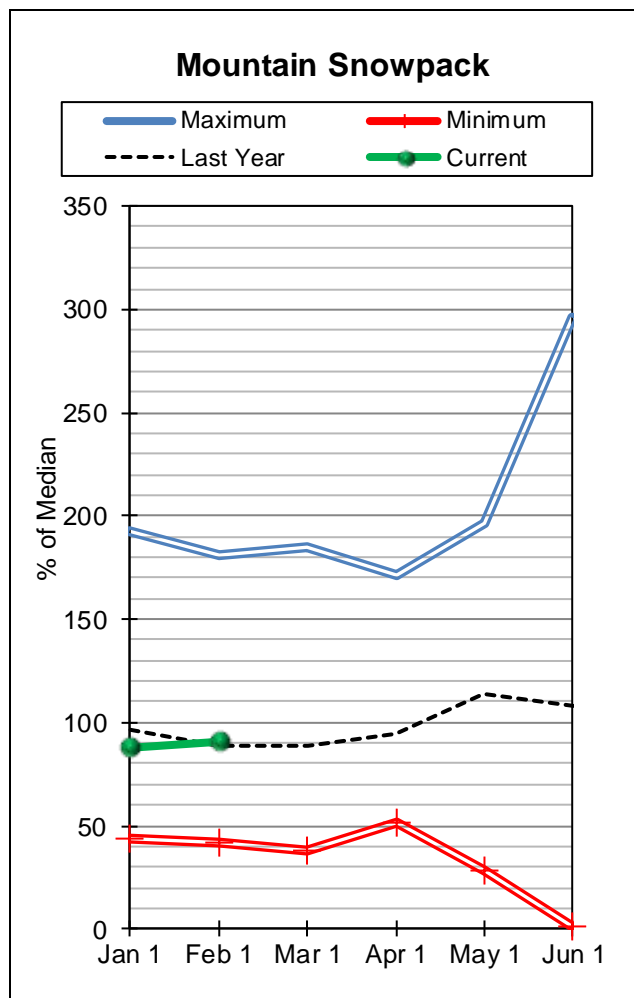
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

3) Median value used in place of average

Reservoir Storage End of January, 2014	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
PAINTED ROCKS LAKE	11.5	11.1	5.9	31.7
LAKE COMO	10.8	12.6	11.0	34.9
Basin-wide Total	22.3	23.7	16.9	66.6
# of reservoirs	2	2	2	2

Watershed Snowpack Analysis February 1, 2014	# of Sites	% Median	Last Year % Median
WEST FORK BITTERROOT	2	122%	90%
EAST SIDE BITTERROOT	3	112%	93%
WEST SIDE BITTERROOT	2	102%	80%
BITTERROOT RIVER BASIN	6	109%	87%

Lower Clark Fork River Basin



It may be hard to believe but the Lower Clark Fork River basin did see some improvement during the month of January. The warm high pressure system put a stop to moisture for mountains and valleys during the middle of the month, but the storms during the first week and end of the month increased the snowpack percent of normal. Mountain SNOTEL stations during the month reported near to slightly below normal snow water equivalent increments during the month. While the month certainly didn't bring abundant moisture it was still sufficient to increase the basin snowpack average. Currently the basin is at 91 percent of average, up from 88 percent last month on Jan 1st, and 94 percent of last year on Feb 1st.

The same warm weather and lack of precipitation during that time left the mountains and valleys combined precipitation below average receiving 88 percent of average for the month of January. The Lower Clark Fork still continues to be well below average for water-year to date precipitation beginning October 1st, with only 72 percent of average and 61 percent of last year. This lack of precipitation should be noted, as it generally corresponds with soil moisture deficits entering the snow year, and could affect our spring runoff as snowmelt approaches.

Streamflow prospects for April-July are currently 100 percent of average, and 110 percent of last year's observed flows.

Reservoir storage for the month is currently at 99 percent of average for Noxon Rapids, and 99 percent of last year.

Lower Clark Fork River Basin Streamflow Forecasts - February 1, 2014

Forecast Exceedance Probabilities for Risk Assessment Chance that actual volume will exceed forecast

LOWER CLARK FORK RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Clark Fork R bl Missoula	APR-JUL	1770	2180	2460	103%	2740	3150	2400
	APR-SEP	2010	2450	2750	103%	3050	3490	2670
Clark Fork R at St. Regis ¹	APR-JUL	2190	2920	3250	103%	3580	4310	3160
	APR-SEP	2510	3280	3630	103%	3980	4750	3510
Clark Fork R nr Plains ^{1,2}	APR-JUL	6910	8480	9200	100%	9920	11500	9200
	APR-SEP	7670	9340	10100	100%	10900	12500	10100
Thompson nr Thompson Falls	APR-JUL	71	108	133	73%	158	195	181
	APR-SEP	85	125	152	74%	179	220	205
Prospect Ck at Thompson Falls	APR-JUL	44	61	72	71%	83	100	102
	APR-SEP	48	65	77	70%	89	106	110
Clark Fork R at Whitehorse Rapids ^{1,2}	APR-JUL	7900	9620	10400	99%	11200	12900	10500
	APR-SEP	8750	10600	11400	99%	12200	14000	11500

1) 90% and 10% exceedance probabilities are actually 95% and 5%

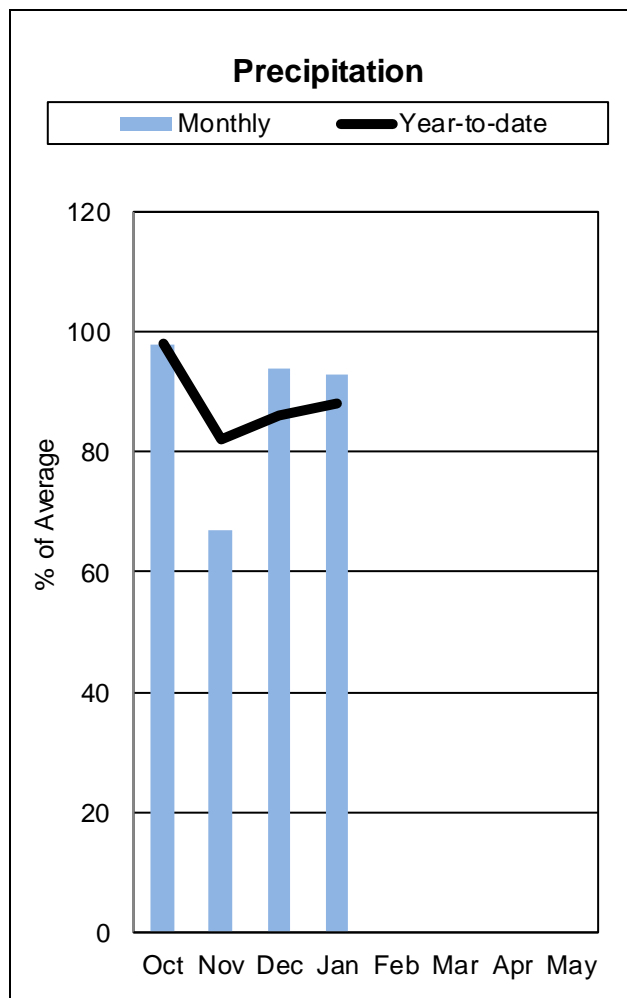
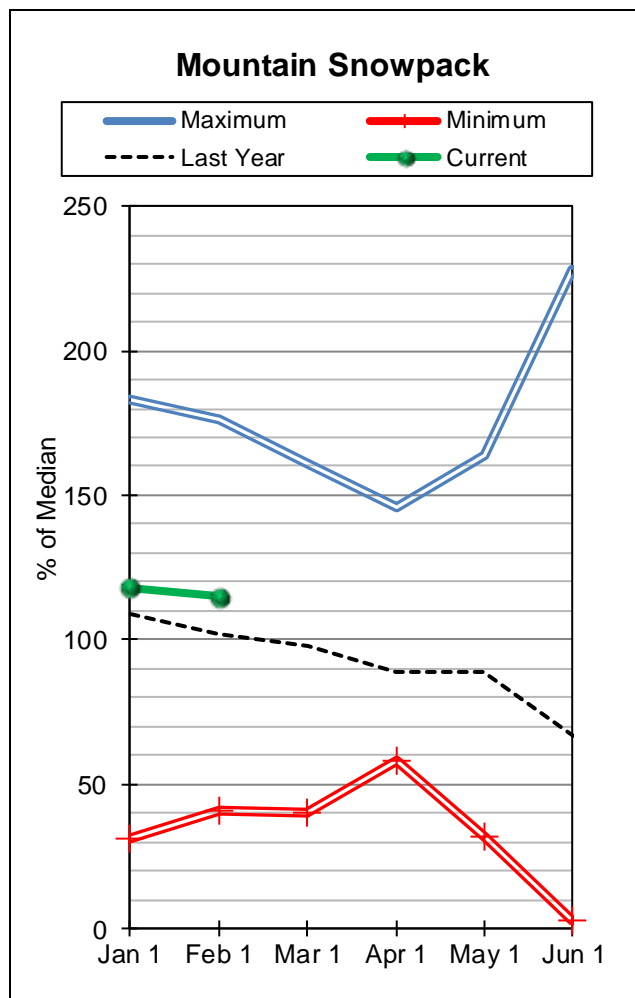
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

3) Median value used in place of average

Reservoir Storage End of January, 2014	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
NOXON RAPIDS RES	312.9	316.5	315.0	335.0
Basin-wide Total	312.9	316.5	315.0	335.0
# of reservoirs	1	1	1	1

Watershed Snowpack Analysis February 1, 2014	# of Sites	% Median	Last Year % Median
LOWER CLARK FORK RIVER BASIN	7	91%	97%

Jefferson River Basin



The Jefferson River basin as a whole continues to do well this year in terms of snowfall, dropping slightly from last month. Currently the basin is 115 percent of normal for snowpack, dropping 3 percent from 118 percent last month, and it is currently 112 percent of last year at this time. There are a few exceptions in the basin which continue to be well below normal for this time of year. SNOTEL sites in the headwaters of the Ruby River basin on the west side of Gravelly Range, and sites in the Red Rocks Lake area continue to get overlooked by the approaching storms from the Northwest. The best illustration of this is Lakeview Ridge SNOTEL, currently 48 percent of normal snowpack for the year. This lack of snow in the Ruby and Res Rocks area will have impacts on the inflows to Ruby and Lima reservoirs, and the Jefferson River as a whole, unless Southwest flow increases the snowpack as we progress this winter.

Drops in snow water equivalent percentage of normal are usually reflected in below average snowfall and the combined mountain and valley precipitation. Compared to many locations across the state, the Jefferson River basin did well with 94 percent of the January monthly average. Water-year to date precipitation totals are indicating 89 percent of average due to the below average precipitation falling this fall.

Streamflow prospects have dropped slightly in the Jefferson due in most part to the lower snowpack totals in the Ruby and Beaverhead drainages which range from 53 to 68 percent of average. Overall, the Jefferson basin is forecast to be 89 percent of average and 198 percent of last year's observed flows. Lower in the Jefferson basin the increased snowpack compensates for these upper basin contributors, with Jefferson River at Three Forks forecasted to be 95 percent of average.

Reservoirs in the Jefferson basin are below normal for this time of the year at 77 percent of average, and 75 percent of last year.

Jefferson River Basin

Streamflow Forecasts - February 1, 2014

Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed forecast

JEFFERSON RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Lima Reservoir Inflow ²	APR-JUL	15.1	35	48	59%	61	81	82
	APR-SEP	10.6	33	49	55%	65	87	89
Clark Canyon Inflow ²	APR-JUL	-16	18.7	54	53%	89	141	101
	APR-SEP	-4	28	66	55%	104	161	120
Beaverhead R at Barretts ²	APR-JUL	10	32	82	64%	132	205	129
	APR-SEP	10	43	101	65%	159	245	156
Ruby R Reservoir Inflow ²	APR-JUL	26	42	52	68%	63	79	77
	APR-SEP	34	52	64	70%	76	94	91
Big Hole R at Wisdom	APR-JUL	22	63	90	88%	117	158	102
	APR-SEP	23	66	96	89%	126	169	108
Big Hole R nr Melrose	APR-JUL	320	440	520	101%	600	720	515
	APR-SEP	345	475	565	101%	655	785	560
Jefferson R nr Twin Bridges ²	APR-JUL	260	455	590	86%	725	920	690
	APR-SEP	250	475	625	86%	775	1000	730
Boulder R nr Boulder	APR-JUL	43	59	70	101%	81	97	69
	APR-SEP	46	63	75	101%	87	104	74
Willow Ck Reservoir Inflow ²	APR-JUL	13.5	19.9	24	143%	29	35	16.8
	APR-SEP	17.4	24	29	150%	34	41	19.3
Jefferson R nr Three Forks ²	APR-JUL	330	550	705	95%	855	1080	740
	APR-SEP	350	600	770	96%	940	1190	800

1) 90% and 10% exceedance probabilities are actually 95% and 5%

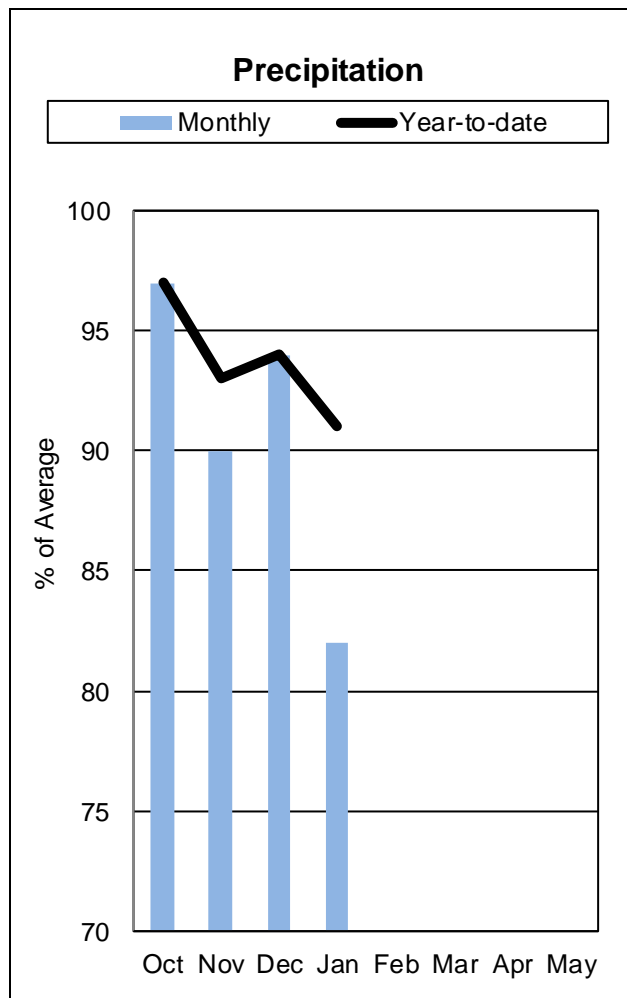
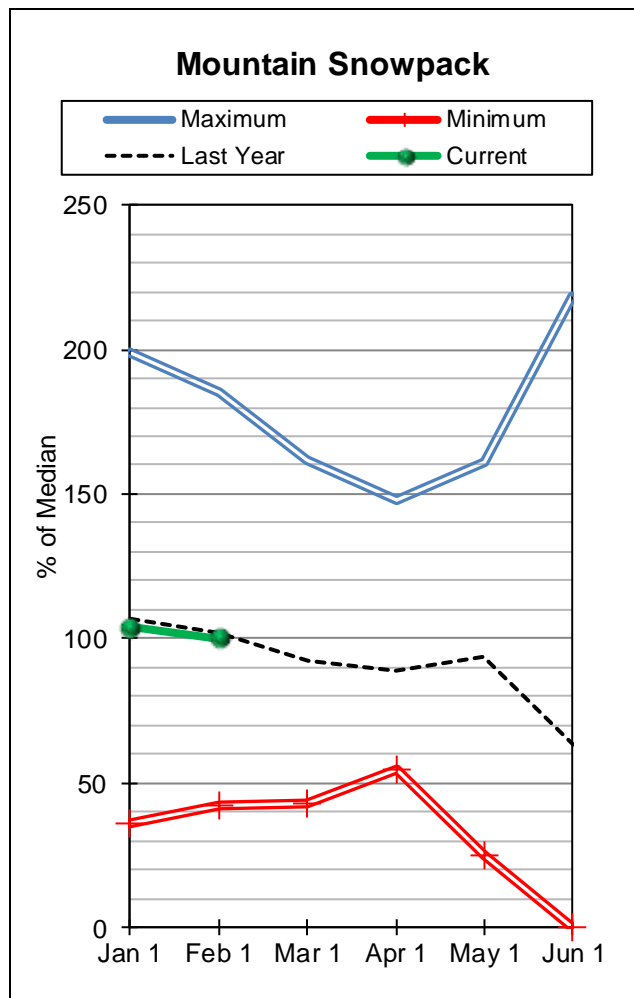
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

3) Median value used in place of average

Reservoir Storage End of January, 2014	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
LIMA RESERVOIR	22.8	37.4	29.3	84.0
CLARK CANYON RES	84.9	116.6	121.7	255.6
RUBY RIVER RESERVOIR	26.2	24.4	23.2	38.8
Basin-wide Total	133.9	178.4	174.2	378.4
# of reservoirs	3	3	3	3

Watershed Snowpack Analysis February 1, 2014	# of Sites	% Median	Last Year % Median
BEAVERHEAD	8	101%	115%
RUBY	5	114%	97%
BIGHOLE	10	124%	101%
BOULDER	6	127%	95%
JEFFERSON RIVER BASIN	25	115%	103%

Madison River Basin



Starting the month the Madison River basin was 104 percent of normal, dropping marginally to 100 percent of normal on February 1st. While not a big loss it is good to see that that basin numbers hung in there during the dry and warm two weeks during the middle of the month. The storms that fell with Northwest flow in the basin preferred the lower part of the Madison River basin over the upper basin. In the upper basin above Hebgen Lake only 91 percent of normal snowpack accumulation occurred, only 88 percent of last year. Lower in the basin in the Madison, Tobacco Root and east side of the Gravelly ranges the snowpack was better with 105 percent of normal and 104 percent of last year. Albro Lake SNOTEL high in the Tobacco Root Range continues to be much above at 159 percent of normal for Feb 1st, 168 percent of last year, also ranking 2nd highest behind 1997 since the site began collecting data.

Precipitation for mountain and valley locations for the month of January was 82 percent of average and 98 percent of last year. Like the mountain SNOTEL and snowcourse measurements in the basin, the areas around West Yellowstone in the upper basin had the lowest percentages of average this month. Overall the water-year to date average is 91 percent since October 1st.

Anticipated water volumes in the Madison River for April to July flows have dropped from last month, reflecting the lack of precipitation in the upper part of the basin, and below average precipitation experienced so far this year. Forecasts indicate April-July will be 83 percent of average, down 9 percent from last month, but 115 percent of the observed flows last year.

Reservoir storage for Feb 1st is currently 110 percent of average for the Madison River basin. Hebgen Lake is currently 111 percent of average, 103 percent of last year. Ennis lake is 98 percent of average, 105 percent of last year.

Madison River Basin

Streamflow Forecasts - February 1, 2014

Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed forecast

MADISON RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Hebgen Reservoir Inflow ²	APR-JUL	255	295	325	88%	355	395	370
	APR-SEP	330	380	415	88%	450	500	470
Ennis Reservoir Inflow ²	APR-JUL	355	440	500	80%	560	650	625
	APR-SEP	455	555	625	81%	695	800	775

1) 90% and 10% exceedance probabilities are actually 95% and 5%

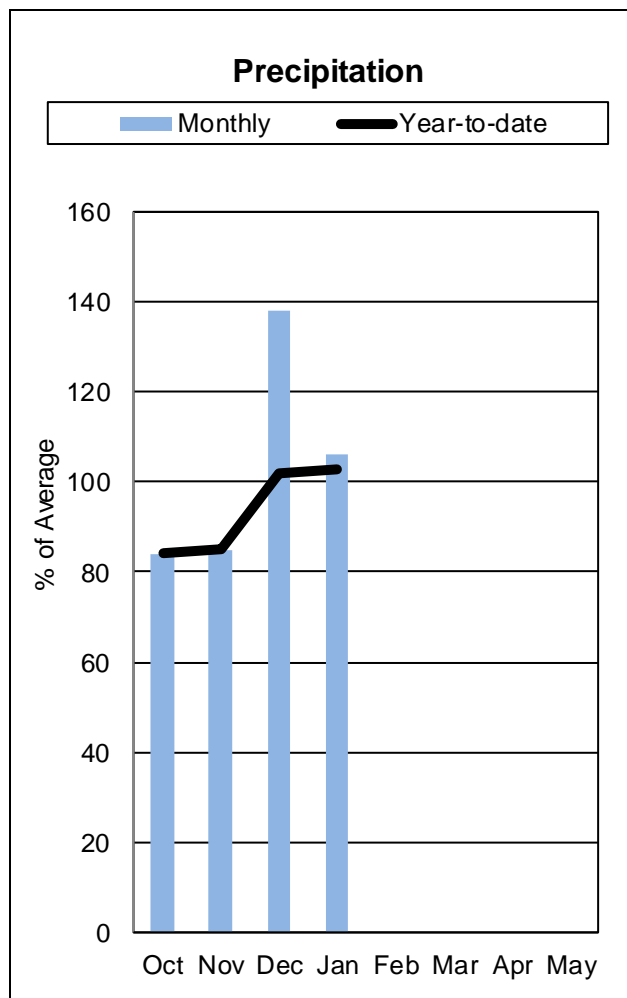
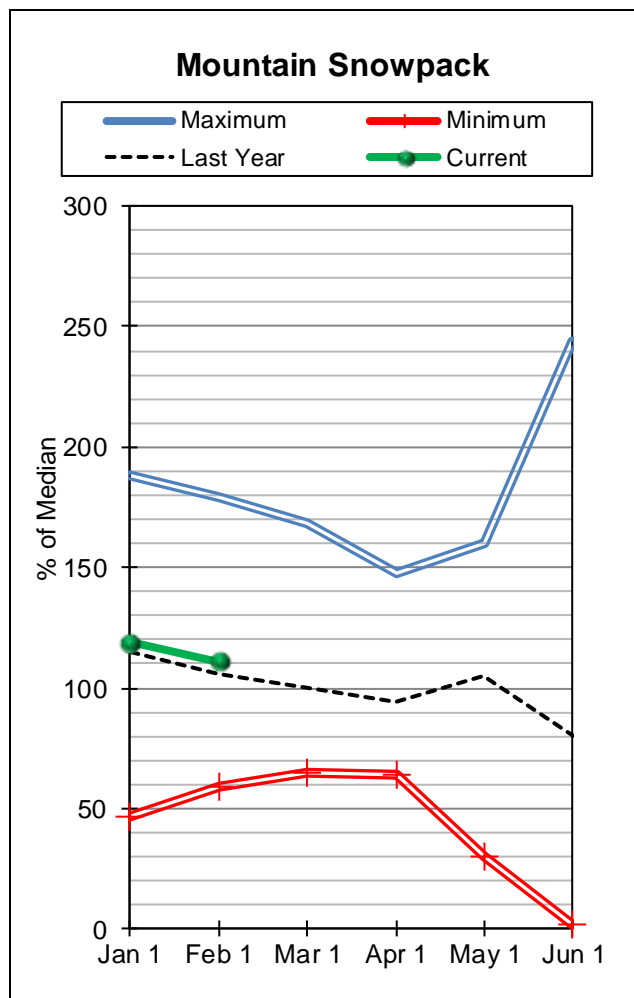
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

3) Median value used in place of average

Reservoir Storage End of January, 2014	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
ENNIS LAKE - LOWER MADISON RES	28.9	27.5	29.8	41.0
HEBGEN LAKE	311.0	302.2	279.0	377.5
Basin-wide Total	339.9	329.6	308.8	418.5
# of reservoirs	2	2	2	2

Watershed Snowpack Analysis February 1, 2014	# of Sites	% Median	Last Year % Median
MADISON abv HEBGEN LAKE	6	91%	103%
MADISON blw HEBGEN LAKE	7	108%	103%
MADISON RIVER BASIN	13	100%	103%

Gallatin River Basin



Feast or famine seems to be the best way to describe the month of January in the Gallatin River basin. Under Northwest flow during the storms at the beginning and end of the month the Bridger Range, and Bridger Bowl skiers, were again treated to some significant snowfall and excellent storm skiing. Hyalite Canyon also picked up some significant snow water equivalent totals during the storms, improving from last month. Unfortunately, as you move up the basin into the headwaters of the Gallatin River above Gallatin Gateway the snowfall wasn't quite as abundant. While these storms provided needed snowfall for the basin, the middle weeks of the month brought unseasonably warm and dry conditions. The lack of steady snowfall was enough to cause the basin normal to slip down slightly from Jan 1st. Currently the Gallatin River basin is still above normal at 111 percent, dropping 7 percent from 118 percent of Jan 1st.

Compared to most of Southwest Montana the abundance of snowfall has helped to compensate for the lack of precipitation during the Fall. January monthly precipitation was 106 percent of average, which was 122 percent of last year on Feb 1st. Snowfall this year has helped to keep the water-year to date precipitation at 103 percent of average since Oct 1st.

Streamflow prospects increased slightly in the Gallatin River basin from last month, rising 2 percent to 103 percent of average for the April – July flows, and 143 percent of the observed flows we saw last year. With substantial snow in the Hyalite and Bridger Range, the East Fork of the Gallatin should make excellent contributions to the Gallatin.

Middle Creek Reservoir in Hyalite canyon is currently 98 percent of average for Feb 1st, and 100 percent of last year at this time.

Gallatin River Basin

Streamflow Forecasts - February 1, 2014

Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed forecast

GALLATIN RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Gallatin R nr Gateway	APR-JUL	315	370	410	103%	450	505	400
	APR-SEP	370	435	480	102%	520	585	470
Hyalite Reservoir Inflow ²	APR-JUL	17.9	20	22	110%	23	25	20
	APR-SEP	21	23	25	109%	26	29	23
Gallatin R at Logan	APR-JUL	285	385	450	102%	520	620	440
	APR-SEP	335	450	525	104%	600	715	505

1) 90% and 10% exceedance probabilities are actually 95% and 5%

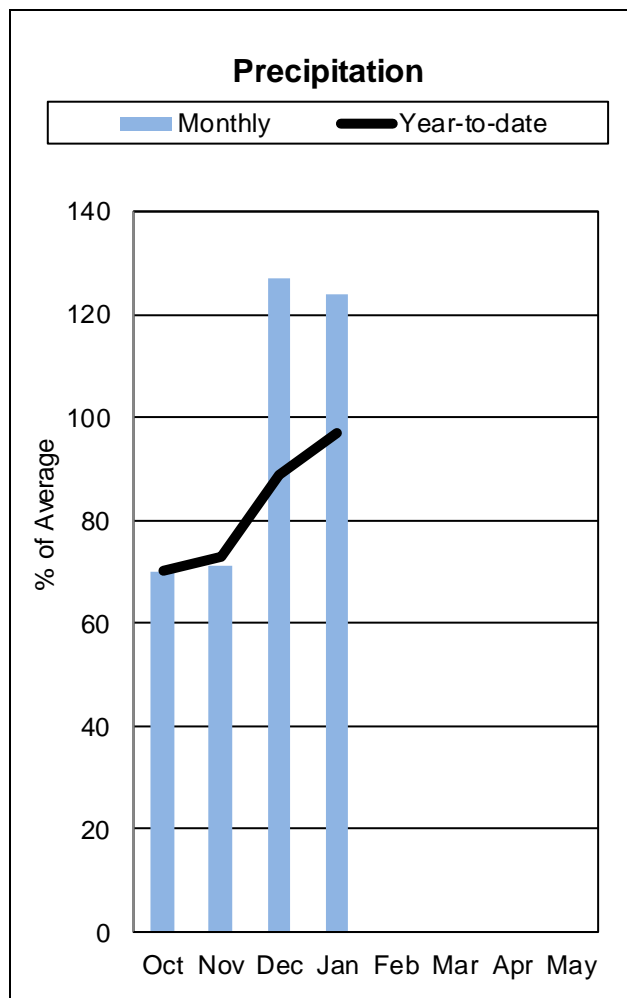
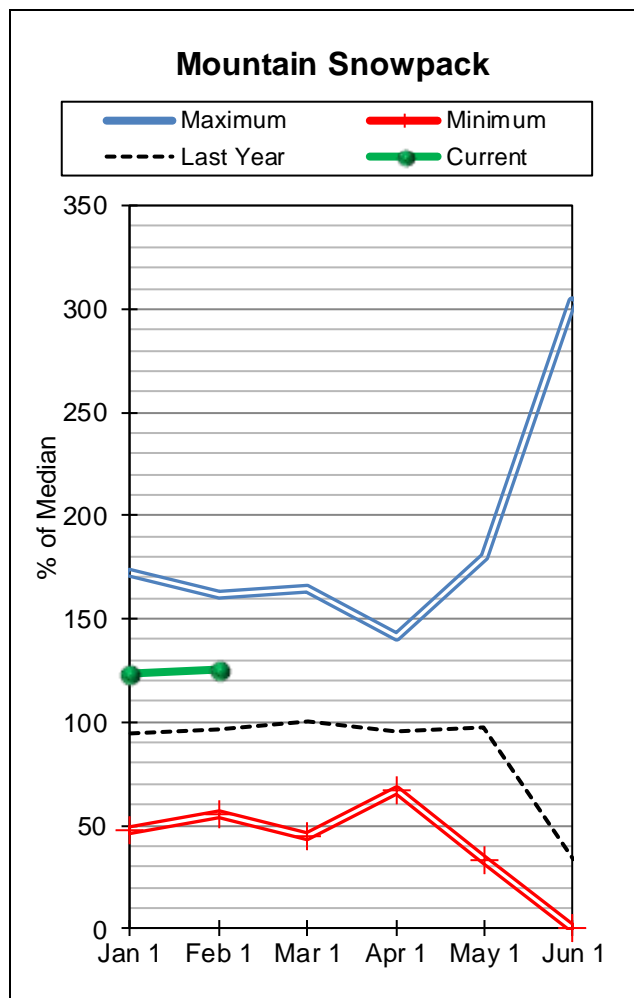
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3) Median value used in place of average

Reservoir Storage End of January, 2014	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
MIDDLE CREEK RES	5.2	5.2	5.3	10.2
Basin-wide Total	5.2	5.2	5.3	10.2
# of reservoirs	1	1	1	1

Watershed Snowpack Analysis February 1, 2014	# of Sites	% Median	Last Year % Median
UPPER GALLATIN	4	96%	114%
HYALITE	2	121%	93%
BRIDGER	2	142%	99%
GALLATIN RIVER BASIN	8	111%	106%

Missouri Mainstem River Basin



The Missouri Mainstem basins continue to show above to well above normal snowpacks on February 1. During the first part of January, cold temperature storms added above normal increments to the existing snowpack. As was experienced all over Montana, a warm dry spell persisted during mid-month. Low elevation sites or sites that are more exposed showed a slight decrease in snow water equivalent (SWE). Higher elevations retained SWE or increased slightly with small localized storms. Storms and colder temperatures returned towards the end of the month. Overall the Missouri Mainstem SWE is 125 percent of normal and 130 percent of last year.

January mountain and valley precipitation for the Missouri Mainstem was near to well above average at 115 percent of average. Mountain sites which are in between the Missouri Headwaters at Three Forks and Canyon Ferry Dam had 128 percent of average. These sites helped to bump the overall Missouri Mainstem River Basin to 124 percent of average and 126 percent of last year. Year to date precipitation for the Basin is 95 percent of average and 79 percent of last year.

Reservoir storages are 99 percent of average and 98 percent of last year.

Assuming average precipitation, the April through July streamflows are forecast to be 96 percent of average and 129 percent of last year.

Missouri Mainstem Basin Streamflow Forecasts - February 1, 2014

Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed forecast

MISSOURI MAINSTEM BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Missouri R at Toston ²	APR-JUL	1040	1420	1680	94%	1940	2320	1790
	APR-SEP	1190	1640	1950	94%	2260	2710	2070
Dearborn R nr Craig	APR-JUL	38	65	83	93%	101	128	89
	APR-SEP	42	71	90	95%	109	138	95
Missouri R at Fort Benton ²	APR-JUL	1490	2040	2410	92%	2780	3330	2610
	APR-SEP	1770	2430	2880	93%	3330	3990	3110
Missouri R nr Virgelle ²	APR-JUL	1730	2340	2760	92%	3180	3790	3000
	APR-SEP	1990	2730	3240	92%	3750	4490	3520
Missouri R nr Landusky ²	APR-JUL	1850	2490	2930	93%	3370	4010	3160
	APR-SEP	2130	2910	3440	92%	3970	4750	3720
Missouri R bl Fort Peck Dam ²	APR-JUL	1810	2510	2990	92%	3470	4170	3240
	APR-SEP	1870	2770	3380	91%	3990	4890	3700
Lake Sakakawea Inflow ²	APR-JUL	5740	7340	8430	101%	9520	11100	8310
	APR-SEP	6160	8140	9490	101%	10800	12800	9400

1) 90% and 10% exceedance probabilities are actually 95% and 5%

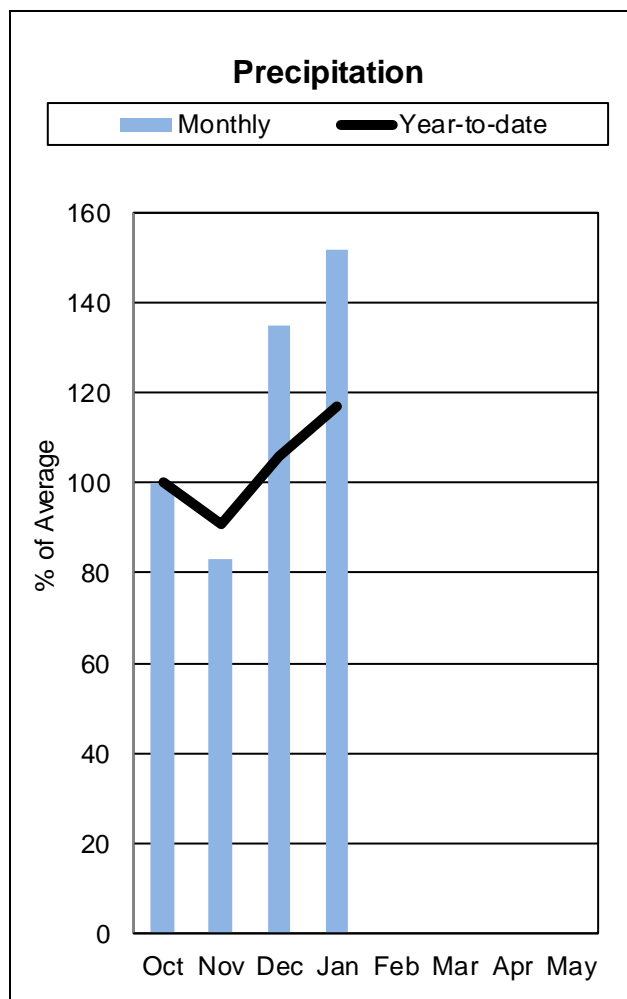
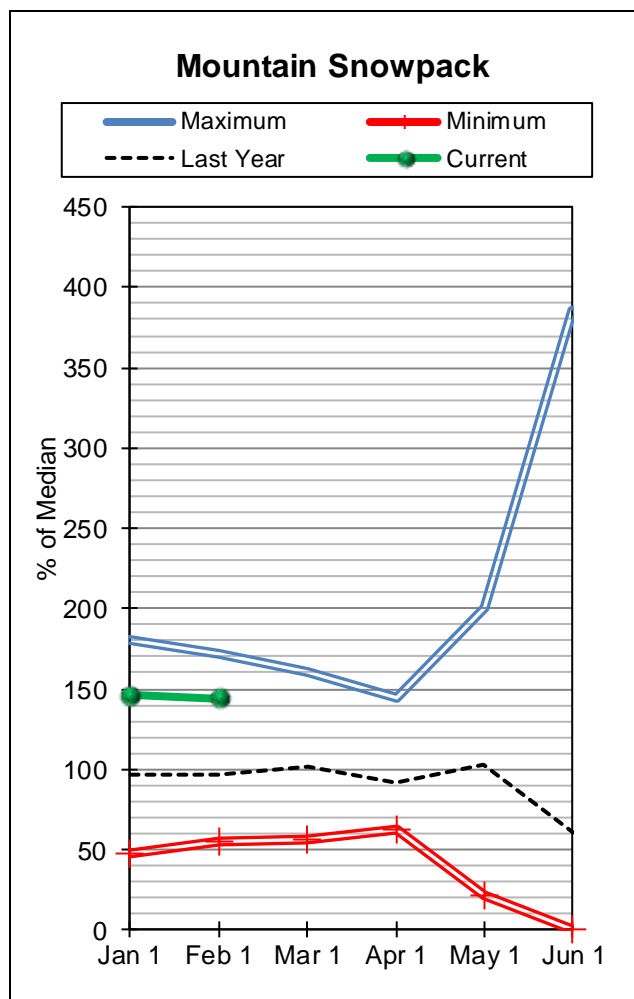
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3) Median value used in place of average

Reservoir Storage End of January, 2014	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
CANYON FERRY LAKE	1483.7	1542.7	1531.0	2043.0
HELENA VALLEY RESERVOIR	6.2	5.7	4.7	9.2
LAKE HELENA	9.7	9.9	10.9	12.7
HAUSER LAKE & LAKE HELENA	69.6	70.0	73.5	74.6
HOLTER LAKE	81.1	81.2	80.7	81.9
FORT PECK LAKE	12786.8	13011.5	12953.0	18910.0
Basin-wide Total	14437.0	14721.0	14653.8	21131.4
# of reservoirs	6	6	6	6

Watershed Snowpack Analysis February 1, 2014	# of Sites	% Median	Last Year % Median
HEADWATERS MAINSTEM	7	125%	96%
SMITH-JUDITH-MUSSELSHELL	10	144%	97%
SUN-TETON-MARIAS	6	108%	93%
MAINSTEM ab FT PECK RES	22	127%	94%
MILK RIVER BASIN	7	119%	78%
MISSOURI MAINSTEM BASIN	29	126%	93%

Smith-Judith-Musselshell River Basins



All of the basins are showing well above average for snowpack for February 1. January increments were 142 percent of the incremental normal. The total basins' snow water equivalent (SWE) for February 1 is 144 percent of normal and 146 percent of last year. The warm and dry spell which occurred mid-month stopped accumulations but for the majority of sites, the snow held. Lower elevation and more exposed sites showed a slight decrease in SWE. The end of the month brought back a wetter pattern and cooler temperatures.

January's mountain and valley precipitation totals for all three major basins were well above average: Smith & Belt 137 percent of average, Judith 176 percent of average and the Musselshell 162 percent of average. The combined Basins' total was 152 percent of average and 159 percent of last year. Year to date was 117 percent of average and 102 percent of last year.

Reservoir storages are near to above average with the exception of Martinsdale which is 71 percent of average. The combined total storage is 106 percent of average and 88 percent of last year.

The April through July streamflows are forecast 135 percent of average and 252 percent of last year. This is assuming average precipitation.

Smith-Judith-Musselshell

Streamflow Forecasts - February 1, 2014

Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed forecast

SMITH-JUDITH-MUSSELSHELL	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Sheep Ck nr White Sulphur Springs	APR-JUL	14.2	17.4	19.6	126%	22	25	15.5
	APR-SEP	16.8	21	23	125%	26	29	18.4
Smith R bl Eagle Ck ²	APR-JUL	91	123	144	136%	165	197	106
	APR-SEP	102	138	163	141%	188	225	116
NF Musselshell R nr Delpine	APR-JUL	2.9	4.2	5	147%	5.8	7.1	3.4
	APR-SEP	3.5	4.9	5.9	148%	6.9	8.3	4
SF Musselshell R ab Martinsdale	APR-JUL	13	32	45	129%	58	77	35
	APR-SEP	14.9	35	49	129%	63	83	38
Musselshell R at Harlowton ²	APR-JUL	20	53	75	132%	97	130	57
	APR-SEP	22	56	80	136%	104	138	59
Musselshell R nr Roundup ²	APR-JUL	-18.2	49	95	142%	141	210	67
	APR-SEP	-12.7	54	100	152%	145	210	66

1) 90% and 10% exceedance probabilities are actually 95% and 5%

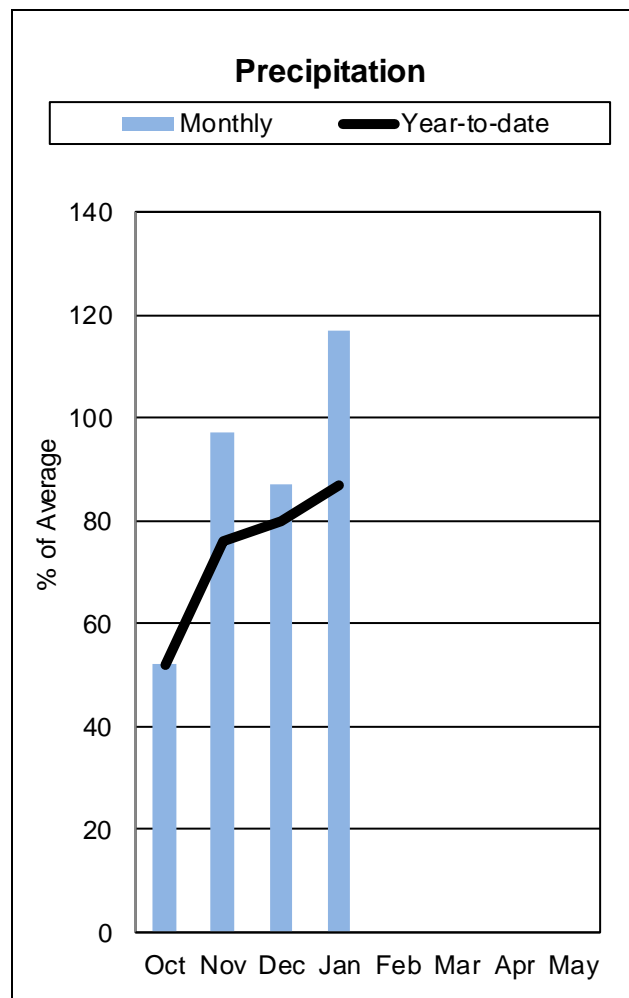
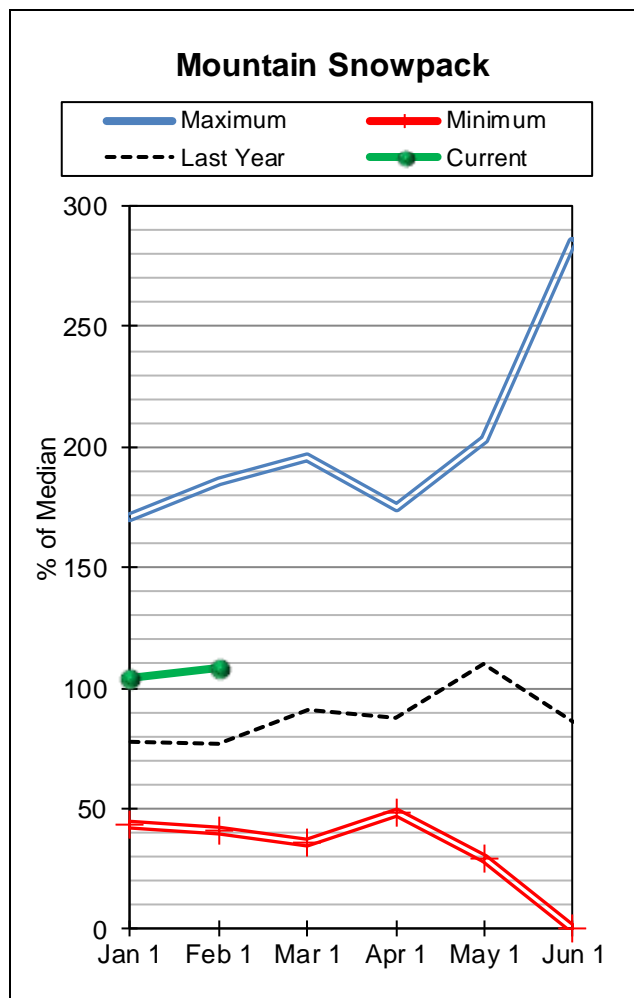
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

3) Median value used in place of average

Reservoir Storage End of January, 2014	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
SMITH RIVER RES	6.5	6.8	5.5	10.6
ACKLEY LAKE	3.6	2.9	2.6	7.0
BAIR RES	3.5	4.3	2.9	7.0
MARTINSDALE RES	5.5	6.8	7.7	23.1
DEADMAN'S BASIN RES	43.5	50.0	40.1	72.2
Basin-wide Total	62.6	70.8	58.8	119.9
# of reservoirs	5	5	5	5

Watershed Snowpack Analysis February 1, 2014	# of Sites	% Median	Last Year % Median
SMITH	6	143%	101%
HIGHWOOD	0	----	----
JUDITH	4	150%	97%
MUSSELSHELL	3	143%	93%
SMITH-JUDITH-MUSSELSHELL	10	144%	97%

Sun-Teton-Marias River Basins



February 1 snowpacks in the Sun-Teton-Marias Basins were a little above normal. The total of all three basins was 108 percent of normal and 116 percent of last year. The first part of January brought pretty good storms and cold temperatures to the area and was followed by the warm dry spell. During this time, the high elevation sites held on to the snow while lower elevation or more exposed sites showed a slight decrease in snow water equivalent (SWE). The end of January brought back a stormier and colder weather pattern.

Mountain and valley precipitation was well above average in the Sun and Teton basins and near average for the Marias. The combined Basins' total for January was 117 percent of average and 131 percent of last year. Year to date precipitation is 88 percent of average and 72 percent of last year.

Reservoir storages range from well below average at Gibson to well above average at Willow Creek. The combined total storage is 96 percent of average and 97 percent of last year.

Assuming average precipitation, April through July streamflows are forecast to be 93 percent of average and 101 percent of last year.

Sun-Teton-Marias

Streamflow Forecasts - February 1, 2014

Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed forecast

SUN-TETON-MARIAS	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Gibson Reservoir Inflow	APR-JUL	265	320	360	91%	400	455	395
	APR-SEP	295	355	395	90%	435	495	440
Two Medicine R nr Browning ²	APR-JUL	126	151	168	92%	185	210	183
	APR-SEP	137	163	180	93%	197	225	194
Badger Ck nr Browning	APR-JUL	55	72	83	94%	94	111	88
	APR-SEP	67	85	97	94%	109	127	103
Swift Reservoir Inflow ²	APR-JUL	36	47	55	96%	63	74	57
	APR-SEP	45	57	66	99%	75	87	67
Dupuyer Ck nr Valier	APR-JUL	1.5	5.8	10.6	95%	15.4	22	11.1
	APR-SEP	1.8	6.5	11.8	93%	17.1	25	12.7
Cut Bank Ck nr Browning	APR-JUL	39	53	63	91%	73	87	69
	APR-SEP	45	60	70	93%	80	95	75
Marias R nr Shelby ²	APR-JUL	156	265	335	97%	405	515	345
	APR-SEP	156	270	345	96%	420	535	360
Teton R nr Dutton	APR-JUL	5.4	17.5	36	86%	54	82	42
	APR-SEP	5.6	21	41	85%	61	90	48

1) 90% and 10% exceedance probabilities are actually 95% and 5%

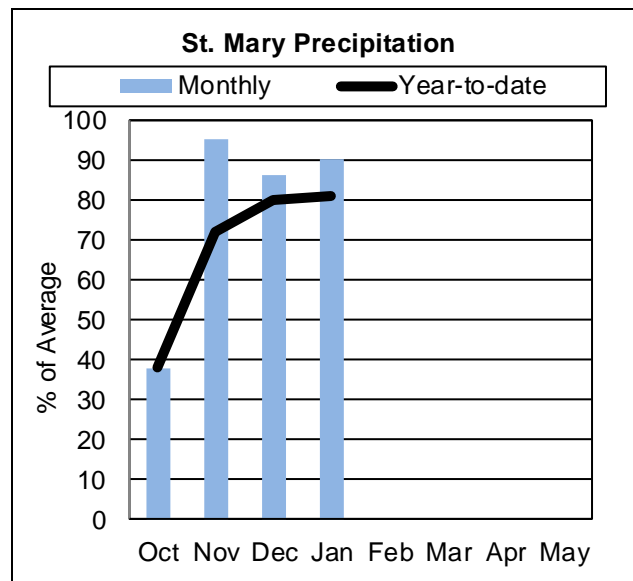
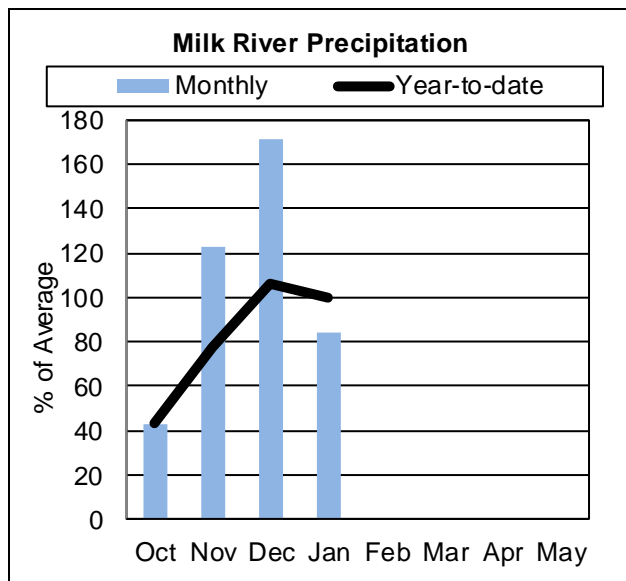
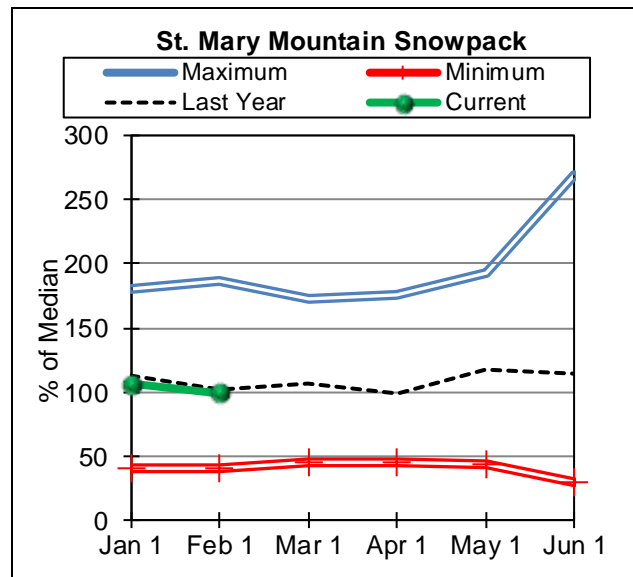
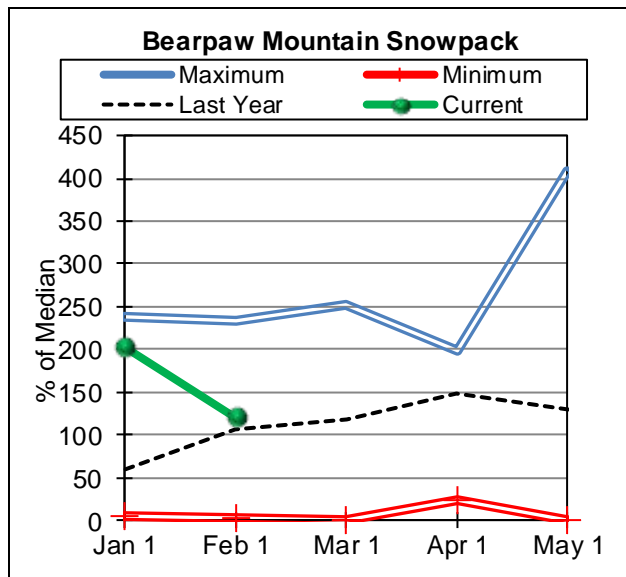
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

3) Median value used in place of average

Reservoir Storage End of January, 2014	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
GIBSON RES	16.5	16.1	39.9	99.1
PISHKUN RES	6.1	1.8	17.5	32.0
WILLOW CREEK	28.8	27.5	22.9	32.2
LOWER TWO MEDICINE LAKE	6.3	0.0	8.2	11.9
FOUR HORNS LAKE	11.2	9.9	10.2	19.2
SWIFT RES	12.8	13.9	15.3	30.0
LAKE FRANCES	34.9	40.4	57.5	112.0
LAKE ELWELL (TIBER)	724.1	760.9	700.8	1347.0
Basin-wide Total	840.7	870.5	872.3	1683.4
# of reservoirs	8	8	8	8

Watershed Snowpack Analysis February 1, 2014	# of Sites	% Median	Last Year % Median
SUN	2	109%	89%
TETON	3	110%	80%
MARIAS	3	107%	96%
SUN-TETON-MARIAS	6	108%	93%

St. Mary and Milk River Basins



As with other basins in this region, the St. Mary and Milk River Basins show pretty good storm activity the first part of January which was followed by the mid-month warm and dry spell. January was rounded out by a return to a stormier and colder weather pattern. Low elevation sites showed a slight decrease in SWE during the warm dry spell. Snow water equivalents at our two SNOTEL sites in Glacier National Park within the St. Mary Basin totaled 99 percent of normal and 96 percent of last year. Sites within the Bear Paw Mountains recorded well above normal snowpacks for February 1 at 150 percent of normal. The Cypress Hills in Alberta, Canada, recorded snowpacks of 113 percent of normal. The overall snowpack for both basins is 156 percent of normal.

January's mountain and valley precipitation for the St. Mary Basin was 89 percent of average and 83 percent of last year. The mountain and valley precipitation for the Milk River Basin was also 88 percent of average and 52 percent of last year. Overall all the combined basin mountain and valley year to date precipitation was 88 percent of average and 63 percent of last year.

January reservoir storages are above to well above average. Lake Sherburne is 104 percent of average, Fresno is 140 percent of average and Nelson is 165 percent of average. The basin wide storage is 137 percent of average and 97 percent of last year.

Assuming average precipitation for the April through July period, the St. Mary River streamflows are forecast to be 94 percent of average. The Milk River streamflows are forecast to be 108 percent of median based on the March through July period and again assuming average precipitation.

St. Mary & Milk Basins

Streamflow Forecasts - February 1, 2014

Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed forecast

ST. MARY & MILK BASINS	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Lake Sherburne Inflow								
	APR-JUL	78	87	93	96%	99	108	97
	APR-SEP	92	101	107	96%	113	122	112
St. Mary R nr Babb ²								
	APR-JUL	280	320	350	95%	380	420	370
	APR-SEP	335	375	405	95%	435	475	425
St. Mary R at Intl Boundary ²								
	APR-JUL	305	365	405	93%	450	510	435
	APR-SEP	365	425	465	92%	505	565	505
Milk R at Western Crossing of Intl Bndry, AB								
	MAR-SEP	4.4	20	31	95%	42	58	33
Milk R at Eastern Crossing of Intl Bndry								
	MAR-SEP	10	38	67	82%	96	139	82

1) 90% and 10% exceedance probabilities are actually 95% and 5%

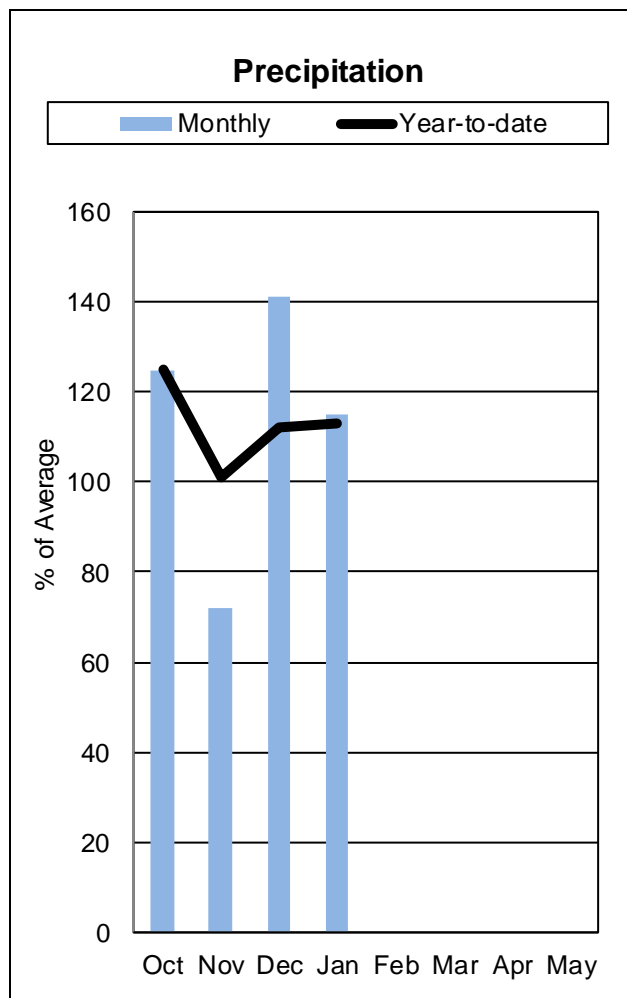
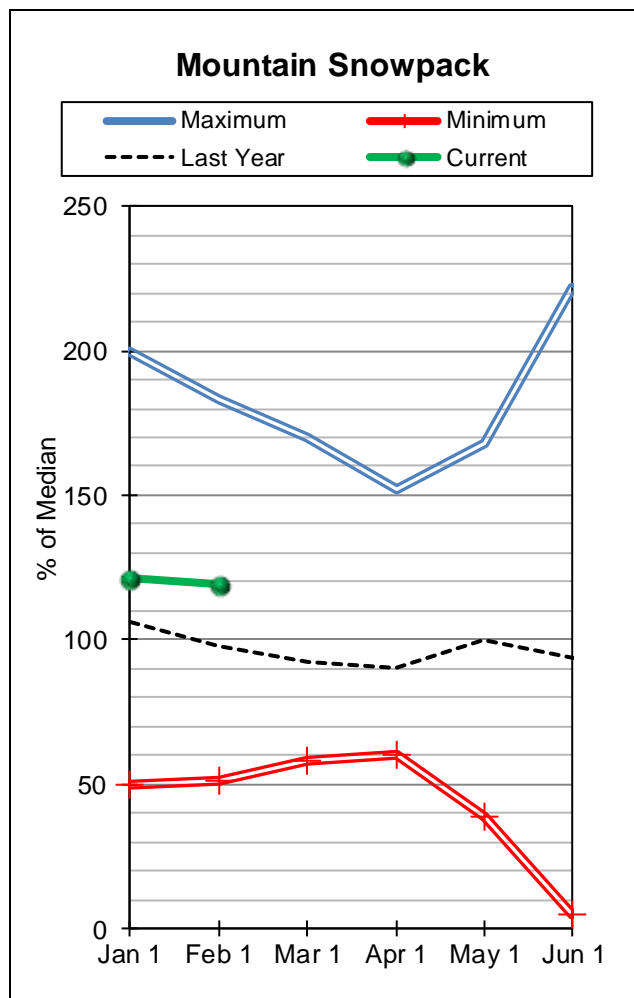
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

3) Median value used in place of average

Reservoir Storage End of January, 2014	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
SHERBURNE LAKE RESERVOIR	29.5	53.3	28.5	64.3
FRESNO RES	58.3	47.8	41.7	127.0
NELSON RES	51.9	43.5	31.5	66.8
Basin-wide Total	139.7	144.6	101.7	258.1
# of reservoirs	3	3	3	3

Watershed Snowpack Analysis February 1, 2014	# of Sites	% Median	Last Year % Median
ST. MARY	2	99%	103%
BEARPAW MOUNTAINS	3	130%	92%
CYPRESS HILLS, CANADA	6	113%	72%
MILK RIVER BASIN	9	119%	78%
ST. MARY & MILK BASINS	11	107%	95%

Upper Yellowstone River Basin



Storms during the beginning and end of the month maintained above average snowpack totals in the Upper Yellowstone basin, with some parts of the basin significantly above average for February 1st. The Red Lodge Creek sub-basin, which saw more continuous snowfall, is having a stellar snowfall year with the average of both SNOTEL sites in the basin reporting 173 percent of normal snowpack. This year is ranked highest for snow water equivalent on February 1st for the two SNOTEL sites in this sub-basin since they began collecting data. Other areas of the basin saw more sporadic snowfall during the month, but still remain above normal for the year. Overall, the Upper Yellowstone basin is 119 percent of normal, down 2 percent from last month, and is 122 percent of last year on February 1st.

Precipitation was equally abundant during the month in the combined mountain and valley precipitation average, ending the month at 114 percent of the January average, and 147 percent of what we saw last January. Water-year to date precipitation totals in the Upper Yellowstone are 113 percent of average since October 1st.

Streamflow prospects look good in the Upper Yellowstone River basin, ranging from 90 percent of average in Yellowstone at the Lake Outlet to 126 percent of average for Red Lodge & Willow Creeks. Continued snowfall in the basin helped to keep the greater basin at 102 percent of average and 129 percent of last year's observed flows.

Reservoirs in the basin are currently 108 percent of average, and 103 percent of last year at this time.

Upper Yellowstone River Basin

Streamflow Forecasts - February 1, 2014

Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed forecast

UPPER YELLOWSTONE RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Yellowstone R at Yellowstone Lake Outlet	APR-JUL	415	475	520	90%	560	620	575
	APR-SEP	545	625	680	88%	735	815	770
Yellowstone R at Corwin Springs	APR-JUL	1320	1470	1580	99%	1690	1840	1590
	APR-SEP	1540	1720	1850	98%	1970	2160	1880
Yellowstone R at Livingston	APR-JUL	1480	1670	1800	100%	1930	2130	1800
	APR-SEP	1730	1960	2110	99%	2270	2500	2140
Shields R nr Livingston	APR-JUL	70	116	147	114%	179	225	129
	APR-SEP	75	126	160	112%	195	245	143
Boulder R at Big Timber	APR-JUL	235	275	305	109%	330	370	280
	APR-SEP	250	295	330	110%	360	405	300
Mystic Lake Inflow ²	APR-JUL	49	54	57	97%	60	65	59
	APR-SEP	62	69	73	99%	77	84	74
Stillwater R nr Absarokee ²	APR-JUL	360	420	460	103%	500	560	445
	APR-SEP	425	495	540	104%	585	655	520
Clarks Fk Yellowstone R nr Belfry	APR-JUL	450	505	540	106%	580	630	510
	APR-SEP	500	555	595	108%	630	685	550
Cooney Reservoir Inflow	APR-JUL	27	40	48	126%	56	69	38
	APR-SEP	37	50	59	123%	68	82	48
Yellowstone R at Billings	APR-JUL	2600	3060	3380	105%	3690	4160	3230
	APR-SEP	2940	3490	3860	103%	4230	4780	3730

1) 90% and 10% exceedance probabilities are actually 95% and 5%

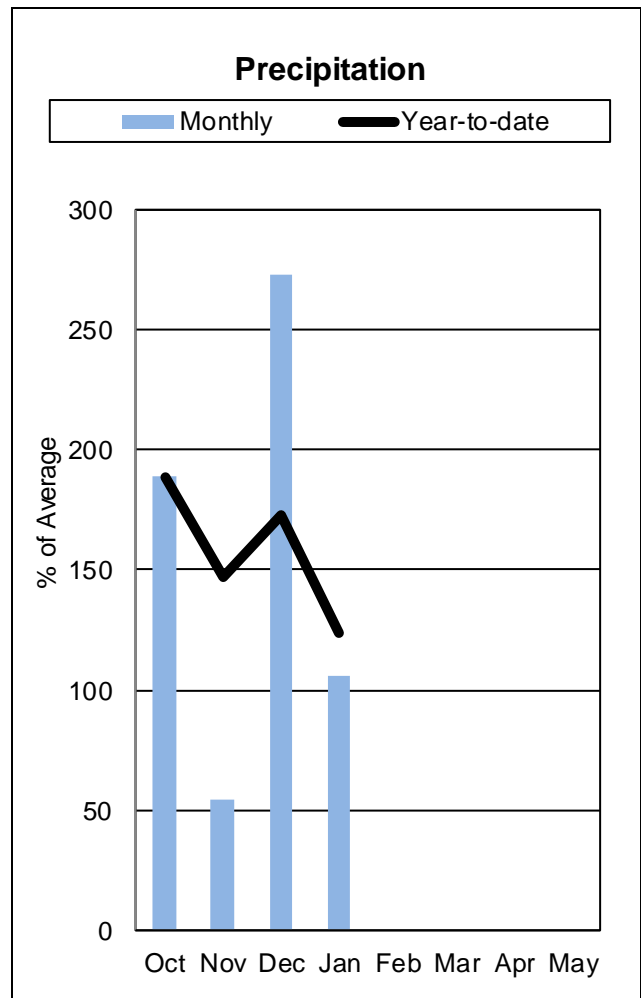
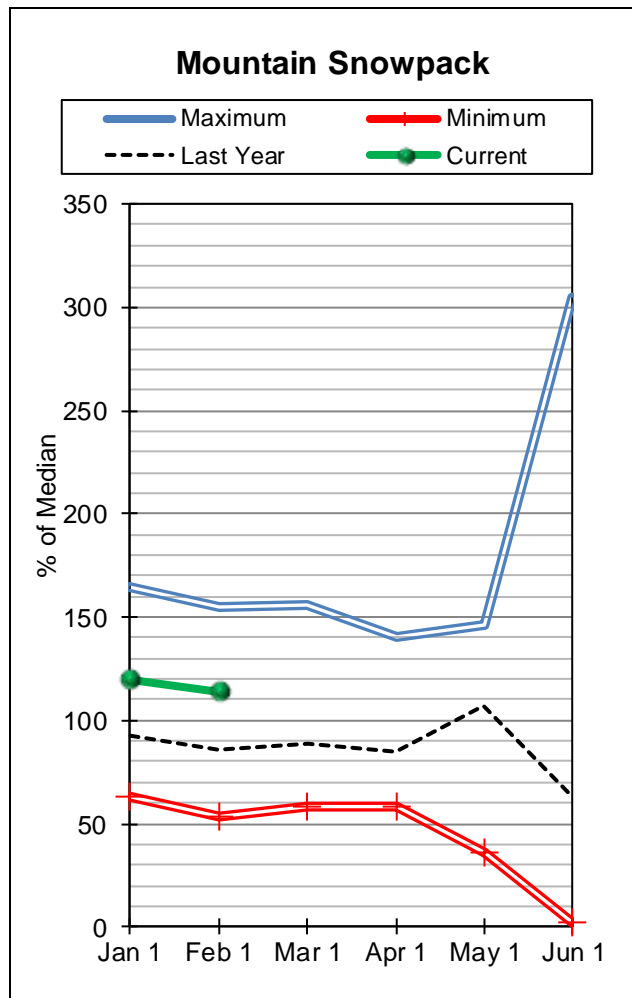
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

3) Median value used in place of average

Reservoir Storage End of January, 2014	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
MYSTIC LAKE	7.3	6.1	5.3	21.0
COONEY RES	17.0	17.5	17.2	27.4
Basin-wide Total	24.3	23.7	22.5	48.4
# of reservoirs	2	2	2	2

Watershed Snowpack Analysis February 1, 2014	# of Sites	% Median	Last Year % Median
YELLOWSTONE ab LIVINGSTON	13	108%	102%
SHIELDS	4	138%	88%
BOULDER-STILLWATER	3	127%	106%
RED LODGE-ROCK CREEK	2	178%	74%
CLARK'S FORK	7	119%	100%
UPPER YELLOWSTONE RIVER BASIN	25	119%	98%

Lower Yellowstone River Basin



Entering the month the basins in the Lower Yellowstone were above average for snowpack, a trend that continued through the month of January. Snowfall during the month started out well, increasing the basin totals through mid-month, until most of the basins were left “high and dry” after high pressure and warm temperatures sat in place until near the end of the month. One last shot of snowfall before the end of the month did help to keep the basins above normal, helping to mitigate the dry spell. Currently the Lower Yellowstone River basin is 114 percent of normal, dropping 5 percent from January 1st, and is 133 percent of last year on February 1st.

Precipitation was slightly above average in the basin with 107 percent of the January monthly average. Water-year to date precipitation beginning on October 1st is 113 percent of average, and 124 percent of last year.

Streamflow prospects in the basin weren’t affected by the dry spell experienced during the middle portion of the month, leaving the Lower Yellowstone right where it started at the beginning of January 1st at 108 percent of average, 148 percent of last year’s observed flows. Most sub-basins indicate above average streamflow, with the highest being the Powder River near Locate, MT with an anticipated 141 percent of average.

Reservoirs in the basins are also above average on February 1st at 114 percent of average, and 105 percent of last year at this time. Bighorn Lake is currently 111 percent of average, and Tongue River is 197 percent of average. Both reservoirs are currently near 68 percent of capacity.

Lower Yellowstone River Basin Streamflow Forecasts - February 1, 2014

Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed forecast

LOWER YELLOWSTONE RIVER BASIN (Wyoming)	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Bighorn R nr St. Xavier ²	APR-JUL	855	1220	1470	107%	1720	2080	1380
	APR-SEP	915	1320	1600	110%	1870	2270	1460
Little Bighorn R nr Hardin	APR-JUL	57	86	105	107%	124	153	98
	APR-SEP	66	97	118	106%	140	171	111
Tongue R nr Dayton ²	APR-JUL	60	79	91	106%	104	123	86
	APR-SEP	71	91	105	107%	118	138	98
Big Goose Ck nr Sheridan	APR-JUL	29	41	48	104%	56	67	46
	APR-SEP	37	48	56	104%	64	76	54
Little Goose Ck nr Bighorn	APR-JUL	20	28	33	106%	38	45	31
	APR-SEP	27	35	41	105%	46	54	39
Tongue River Reservoir Inflow ²	APR-JUL	98	162	205	106%	250	310	193
	APR-SEP	120	187	230	107%	280	345	215
Yellowstone R at Miles City ²	APR-JUL	3640	4490	5060	106%	5630	6480	4780
	APR-SEP	4090	5080	5760	106%	6430	7420	5450
Powder R at Moorehead	APR-JUL	145	205	245	138%	285	345	177
	APR-SEP	167	230	270	138%	310	375	196
Powder R nr Locate	APR-JUL	156	230	280	141%	330	405	199
	APR-SEP	177	255	310	141%	365	445	220
Yellowstone R nr Sidney ²	APR-JUL	3630	4580	5230	108%	5880	6830	4830
	APR-SEP	3970	5100	5870	108%	6640	7770	5430

1) 90% and 10% exceedance probabilities are actually 95% and 5%

2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

3) Median value used in place of average

Reservoir Storage End of January, 2014	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
BIGHORN LAKE	917.4	875.8	825.9	1356.0
TONGUE RIVER RES	52.7	46.6	26.7	79.1
Basin-wide Total	970.2	922.4	852.6	1435.1
# of reservoirs	2	2	2	2

Watershed Snowpack Analysis February 1, 2014	# of Sites	% Median	Last Year % Median
WIND RIVER (Wyoming)	18	95%	82%
SHOSHONE RIVER (Wyoming)	4	115%	96%
BIGHORN RIVER (Wyoming)	18	127%	94%
LITTLE BIGHORN (Wyoming)	3	134%	73%
TONGUE RIVER (Wyoming)	10	119%	82%
POWDER RIVER (Wyoming)	9	143%	96%
LOWER YELLOWSTONE RIVER BASIN (Wyoming)	46	114%	86%

Montana Site Report

Site Name	Network	Elevation	Depth (in)	SWE (in)	Median (in)	% Median	Last Year SWE (in)	Last Year % Median
ALBRO LAKE	SNOTEL	8300'	59	17.5	11.0	159%	10.4	95%
AMBROSE	SC	6480'						
ARCH FALLS	SC	7350'						
ASHLEY DIVIDE	SC	4820'	15	2.5	4.5	56%	3.2	71%
BADGER PASS	SNOTEL	6900'	64	21.4	19.5	110%	19.7	101%
BANFIELD MOUNTAIN	SNOTEL	5600'	41	9.8	12.1	81%	12.5	103%
BAREE CREEK	SC	5500'						
BAREE MIDWAY	SC	4600'						
BAREE TRAIL	SC	3800'						
BARKER LAKES	SNOTEL	8250'	46	10.4	8.0	130%	8.9	111%
BASIN CREEK	SNOTEL	7180'	36	7.5	4.5	167%	4.2	93%
BASIN CREEK	SC	7180'	33	7.1	4.3	165%	4.4	102%
BASSOO PEAK	SC	5150'						
BEAGLE SPRINGS	SNOTEL	8850'	27	5.5	5.2	106%	5.4	104%
BEAR BASIN	SC	8150'						
BEAR MOUNTAIN	SNOTEL	5400'	88	28.2	36.6	77%	35.9	98%
BEARTOOTH LAKE	SNOTEL	9360'	63	15.1	13.9	109%	11.4	82%
BEAVER CREEK	SNOTEL	7850'	52	12.3	11.5	107%	13.2	115%
BIG SNOWY	SC	7150'						
BISSON CREEK	SNOTEL	4920'	34	7.4	6.3	117%	4.7	75%
BLACK BEAR	SNOTEL	8170'	79	21.5	23.3	92%	26.4	113%
BLACK MOUNTAIN	SC	7750'						
BLACK PINE	SNOTEL	7210'	39	7.6	6.2	123%	6.2	100%
BLACKTAIL	SC	5650'	26	7.2	8.8	82%	7.5	85%
BLACKTAIL MTN	SNOTEL	5650'	37	8.3			7.6	
BLOODY DICK	SNOTEL	7600'	39	8.6	7.6	113%	8.3	109%
BOTS SOTS	SC	7750'						
BOULDER MOUNTAIN	SNOTEL	7950'	64	16.9	12.6	134%	12.8	102%
BOX CANYON	SNOTEL	6670'	31	6.7	5.8	116%	4.7	81%
BOXELDER CREEK	SC	5100'	19	4.9	4.4	111%		
BRACKETT CREEK	SNOTEL	7320'	64	16.8	11.4	147%	11.9	104%
BRISTOW CREEK	SC	3900'						
BRUSH CREEK TIMBER	SC	5000'						
BULL MOUNTAIN	SC	6600'						
BURNT MTN	SNOTEL	5880'	28	5.9	2.4	246%	2.4	100%
CABIN CREEK	SC	5200'						
CALVERT CREEK	SNOTEL	6430'	31	6.0	5.5	109%	5.5	100%
CAMP SENIA	SC	7890'						
CANYON	SNOTEL	7870'	37	7.8	8.2	95%	7.5	91%
CARROT BASIN	SNOTEL	9000'	63	15.8	16.7	95%	18.6	111%
CARROT BASIN	SC	9000'						
CHESSMAN RESERVOIR	SC	6200'	12	2.4	2.1	114%		
CHICAGO RIDGE	SC	5800'	66	20.4			27.8	
CHICKEN CREEK	SC	4060'	41	12.7	10.8	118%	8.9	82%
CLOVER MEADOW	SNOTEL	8600'	39	8.7	10.3	84%	8.5	83%
COLE CREEK	SNOTEL	7850'	48	12.8	8.4	152%	5.6	67%
COMBINATION	SNOTEL	5600'	18	3.0	3.0	100%	3.4	113%
COPPER BOTTOM	SNOTEL	5200'	19	4.6			2.9	
COPPER CAMP	SNOTEL	6950'	68	24.4			26.7	
COPPER CAMP	SC	6950'						
COPPER MOUNTAIN	SC	7700'	25	7.2	6.2	116%	5.6	90%
COTTONWOOD CREEK	SC	6400'						
COYOTE HILL	SC	4200'	36	6.2	6.0	103%	4.8	80%

Site Name	Network	Elevation	Depth (in)	SWE (in)	Median (in)	% Median	Last Year SWE (in)	Last Year % Median
CRYSTAL LAKE	SNOTEL	6050'	49	11.5	7.4	155%	6.4	86%
DAD CREEK LAKE	SC	8800'						
DAISY PEAK	SNOTEL	7600'	40	8.5	5.9	144%	5.4	92%
DALY CREEK	SNOTEL	5780'	38	7.7	6.6	117%	7.0	106%
DARKHORSE LAKE	SNOTEL	8600'	78	22.7	17.6	129%	20.1	114%
DEADMAN CREEK	SNOTEL	6450'	46	9.8	6.5	151%	6.1	94%
DESERT MOUNTAIN	SC	5600'						
DISCOVERY BASIN	SC	7050'	27	5.7	5.9	97%	5.4	92%
DIVIDE	SNOTEL	7800'	27	5.0	6.2	81%	7.0	113%
DIX HILL	SC	6400'	28	6.5	6.6	98%	4.9	74%
DUPUYER CREEK	SNOTEL	5750'	24	5.4	5.0	108%	2.1	42%
EAGLE CREEK	SC	7000'						
EAST BOULDER MINE	SNOTEL	6335'	19	3.3			1.8	
EL DORADO MINE	SC	7800'						
ELK HORN SPRINGS	SC	7800'						
ELK PEAK	SNOTEL	7600'	57	18.0			15.4	
ELK PEAK	SC	8000'						
EMERY CREEK	SNOTEL	4350'	44	12.6	9.5	133%	9.2	97%
EMERY CREEK	SC	4350'						
FATTY CREEK	SC	5500'						
FISH CREEK	SC	8000'	40	9.7	5.5	176%	6.1	111%
FISHER CREEK	SNOTEL	9100'	80	22.7	20.6	110%	23.3	113%
FLATTOP MTN.	SNOTEL	6300'	91	28.5	28.5	100%	32.1	113%
FLEECER RIDGE	SC	7500'						
FOREST LAKE	SC	6400'						
FOUR MILE	SC	6900'						
FREIGHT CREEK	SC	6000'						
FROHNER MEADOW	SNOTEL	6480'	30	5.5	4.5	122%	4.5	100%
GARVER CREEK	SNOTEL	4250'	27	5.1	6.8	75%	6.6	97%
GIBBONS PASS	SC	7100'						
GOAT MOUNTAIN	SC	7000'						
GOVERNMENT SADDLE	SC	5270'	59	19.4			22.6	
GRAVE CREEK	SNOTEL	4300'	44	11.9	10.9	109%	9.4	86%
GRIFFIN CREEK DIVIDE	SC	5150'						
HAND CREEK	SNOTEL	5035'	36	7.7	7.7	100%	5.9	77%
HAWKINS LAKE	SNOTEL	6450'	52	13.9	16.1	86%	19.2	119%
HAYMAKER	SC	8050'						
HEBGEN DAM	SC	6550'	28	5.2	6.8	76%	6.0	88%
HELL ROARING DIVIDE	SC	5770'	63	20.6	19.9	104%	19.4	97%
HERRIG JUNCTION	SC	4850'	50	16.9	17.6	96%	14.3	81%
HIGHWOOD DIVIDE	SC	5650'	18	4.1			2.2	
HIGHWOOD STATION	SC	4600'	23	4.2			2.3	
HOLBROOK	SC	4530'	28	5.4	6.0	90%	3.5	58%
HOODOO BASIN	SNOTEL	6050'	80	22.2	26.3	84%	24.9	95%
HUMBOLDT GULCH	SNOTEL	4250'	43	9.9	8.6	115%	6.9	80%
JAKES CANYON	SC	9040'						
JOHNSON PARK	SC	6450'	25	5.3	3.4	156%	4.5	132%
KISHENEHN	SC	3890'						
KRAFT CREEK	SNOTEL	4750'	56	12.5			6.8	
LAKE CAMP	SC	7780'	27	4.6	6.0	77%	6.4	107%
LAKE CREEK	SC	6100'						
LAKEVIEW CANYON	SC	6930'						
LAKEVIEW RIDGE	SNOTEL	7400'	19	3.2	6.5	49%	7.8	120%
LEMHI RIDGE	SNOTEL	8100'	36	7.4	6.4	116%	6.1	95%
LICK CREEK	SNOTEL	6860'	33	6.9	5.9	117%	5.3	90%

Site Name	Network	Elevation	Depth (in)	SWE (in)	Median (in)	% Median	Last Year SWE (in)	Last Year % Median
LOGAN CREEK	SC	4300'						
LOLO PASS	SNOTEL	5240'	75	18.8	18.7	101%	14.7	79%
LONE MOUNTAIN	SNOTEL	8880'	46	11.7	11.2	104%	11.6	104%
LOOKOUT	SNOTEL	5140'	52	12.8	19.4	66%	14.9	77%
LOWER TWIN	SNOTEL	7900'	54	14.3	11.0	130%	10.8	98%
LUBRECHT FLUME	SNOTEL	4680'	18	3.4	3.8	89%	3.0	79%
LUBRECHT FLUME	SC	4680'						
LUBRECHT FOREST NO 3	SC	5450'	21	3.5	3.2	109%	2.5	78%
LUBRECHT FOREST NO 4	SC	4650'	110	1.4	1.8	78%	1.4	78%
LUBRECHT FOREST NO 6	SC	4040'	16	2.4	2.0	120%	2.6	130%
LUBRECHT HYDROPLOT	SC	4200'	15	2.4	3.2	75%	2.2	69%
LUPINE CREEK	SC	7380'	23	4.8	4.8	100%	6.0	125%
MADISON PLATEAU	SNOTEL	7750'	50	12.2	14.1	87%	15.8	112%
MANY GLACIER	SNOTEL	4900'	33	9.0	9.5	95%	6.8	72%
MARIAS PASS	SC	5250'	36	10.9	10.6	103%	9.8	92%
MINERAL CREEK	SC	4000'						
MONUMENT PEAK	SNOTEL	8850'	64	15.5	12.0	129%	14.7	123%
MOSS PEAK	SNOTEL	6780'	91	25.5	21.7	118%	22.9	106%
MOULTON RESERVOIR	SC	6850'	23	3.8	4.2	90%		
MOUNT ALLEN NO 7	SC	5700'						
MOUNT LOCKHART	SNOTEL	6400'	46	13.4	12.2	110%	11.4	93%
MUDD LAKE	SC	7650'						
MULE CREEK	SNOTEL	8300'	49	10.9	8.8	124%	10.1	115%
N FK ELK CREEK	SNOTEL	6250'	36	7.7	6.7	115%	6.3	94%
NEVADA RIDGE	SNOTEL	7020'	37	9.6	8.6	112%	7.6	88%
NEW WORLD	SC	6900'			7.8			
NEZ PERCE CAMP	SNOTEL	5650'	48	10.5	8.6	122%	7.8	91%
NOISY BASIN	SNOTEL	6040'	94	29.1	25.4	115%	27.8	109%
NOISY BASIN	SC	6040'						
NORRIS BASIN	SC	7550'	30	6.1	6.5	94%	5.4	83%
NORTH FORK JOCKO	SNOTEL	6330'	110	30.0	27.1	111%	24.0	89%
NORTH FORK JOCKO	SC	6330'						
NORTHEAST ENTRANCE	SNOTEL	7350'	34	7.3	6.4	114%	5.0	78%
ONION PARK	SNOTEL	7410'	49	10.8	7.9	137%	7.3	92%
ONION PARK	SC	7410'						
OPHIR PARK	SC	7150'	36	9.0	8.7	103%	6.8	78%
PARKER PEAK	SNOTEL	9400'	66	16.8	13.0	129%	14.1	108%
PETERSON MEADOWS	SNOTEL	7200'	31	6.7	5.5	122%	6.2	113%
PICKFOOT CREEK	SNOTEL	6650'	42	9.4	6.5	145%	7.1	109%
PIKE CREEK	SNOTEL	5930'	20	3.7			5.4	
PIPESTONE PASS	SC	7200'	17	4.0	2.4	167%	2.8	117%
PLACER BASIN	SNOTEL	8830'	59	13.7	10.5	130%	10.6	101%
POORMAN CREEK	SNOTEL	5100'	74	22.1	23.4	94%	22.9	98%
PORCUPINE	SNOTEL	6500'	26	5.4	4.1	132%	2.6	63%
POTOMAGETON PARK	SC	7150'						
REVAIS	SC	4800'						
ROCK CREEK MDWS	SC	3400'	27	6.6			7.6	
ROCKER PEAK	SNOTEL	8000'	48	10.3	8.2	126%	6.7	82%
ROCKY BOY	SNOTEL	4700'	20	4.8	3.2	150%	3.4	106%
ROCKY BOY	SC	4700'	10	2.7	2.1	129%		
ROLAND SUMMIT	SC	5120'						
S FORK SHIELDS	SNOTEL	8100'	49	12.3	9.2	134%	6.6	72%
SACAJAWEA	SNOTEL	6550'	50	12.0	8.9	135%	8.3	93%
SADDLE MTN.	SNOTEL	7940'	72	19.3	15.8	122%	14.1	89%
SHORT CREEK	SNOTEL	7000'	13	2.7	3.6	75%	4.1	114%

Site Name	Network	Elevation	Depth (in)	SWE (in)	Median (in)	% Median	Last Year SWE (in)	Last Year % Median
SKALKAHO SUMMIT	SNOTEL	7250'	60	13.8	14.0	99%	12.7	91%
SLEEPING WOMAN	SNOTEL	6150'	41	9.3	9.6	97%	8.3	86%
SLIDE ROCK MOUNTAIN	SC	7100'						
SPOTTED BEAR MOUNTAIN	SC	7000'	39	9.7	8.7	111%	7.0	80%
SPUR PARK	SNOTEL	8100'	73	19.2	12.8	150%	13.7	107%
STAHL PEAK	SNOTEL	6030'	68	20.8	22.1	94%	20.0	90%
STAHL PEAK	SC	6030'						
STEMPLE PASS	SC	6600'						
STORM LAKE	SC	7780'	35	8.1	7.4	109%	7.0	95%
STRINGER CREEK	SNOTEL	6550'	45	9.8	6.7	146%	6.9	103%
STRINGER CREEK	SC	6550'						
STRYKER BASIN	SC	6180'	60	21.2	19.6	108%	19.2	98%
STUART MOUNTAIN	SNOTEL	7400'	75	20.0	20.4	98%	20.5	100%
STUART MOUNTAIN	SC	7400'			19.4			
TAYLOR ROAD	SC	4080'	16	3.0	2.2	136%		
TEN MILE LOWER	SC	6600'	22	5.8	4.0	145%	5.2	130%
TEN MILE MIDDLE	SC	6800'	29	7.5	6.0	125%	5.8	97%
TEPEE CREEK	SNOTEL	8000'	32	6.1	8.5	72%	9.0	106%
TIMBERLINE CREEK	SC	8850'						
TIZER BASIN	SNOTEL	6880'	30	7.1	6.0	118%	5.5	92%
TRINKUS LAKE	SC	6100'	75	26.6	25.2	106%	25.7	102%
TRUMAN CREEK	SC	4060'			2.9		3.2	110%
TWELVEMILE CREEK	SNOTEL	5600'	48	11.4	11.0	104%	9.1	83%
TWENTY-ONE MILE	SC	7150'	35	7.4	10.0	74%	13.0	130%
TWIN LAKES	SNOTEL	6400'	87		24.9		19.8	80%
UPPER HOLLAND LAKE	SC	6200'	63	22.2	20.6	108%	17.6	85%
WALDRON	SNOTEL	5600'	31	7.3	6.6	111%	5.6	85%
WARM SPRINGS	SNOTEL	7800'	65	14.4	12.3	117%	10.9	89%
WEASEL DIVIDE	SC	5450'	60	19.8	20.6	96%	18.9	92%
WEST YELLOWSTONE	SNOTEL	6700'	33	7.0	7.0	100%	6.4	91%
WEST YELLOWSTONE	SC	6700'	30	6.1	6.7	91%	5.4	81%
WHISKEY CREEK	SNOTEL	6800'	40	8.6	9.6	90%	7.8	81%
WHITE ELEPHANT	SNOTEL	7710'	46	11.9	16.0	74%	20.9	131%
WHITE MILL	SNOTEL	8700'	65	17.0	14.6	116%	14.8	101%
WOLVERINE	SNOTEL	7650'	36	9.5	7.1	134%	6.8	96%
WOOD CREEK	SNOTEL	5960'	29	6.2	5.8	107%	4.7	81%
WRONG CREEK	SC	5700'						
WRONG RIDGE	SC	6800'						
YOUNTS PEAK	SNOTEL	8350'			9.6		9.0	94%

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Montana
Water Supply Outlook
Report
Natural Resources Conservation Service

